

FAMILY STRESS, ADOLESCENT COPING,  
AND ADOLESCENT FAMILY  
LIFE SATISFACTION

By

ERLENE CARSON

Bachelor of University Studies  
Oklahoma State University  
Stillwater, Oklahoma  
1978

Master of Christian Counseling  
Oral Roberts University  
Tulsa, Oklahoma  
1989

Submitted to the Faculty of the  
Graduate College of the  
Oklahoma State University  
in partial fulfillment of  
the requirements for  
the Degree of  
DOCTOR OF PHILOSOPHY  
May, 1995

C O P Y R I G H T

by

Erlene Carson

May, 1995

FAMILY STRESS, ADOLESCENT COPING,  
AND ADOLESCENT FAMILY  
LIFE SATISFACTION

Thesis Approved:

*Carol S. Henry*

Thesis Adviser

*Linda C. Robinson*

*Margaret J. Weber*

*Daniel Fournier*

*Thomas C. Collins*

Dean of the Graduate College

## ACKNOWLEDGMENTS

I wish to thank each of the distinguished members of my committee: Dr. Henry, my dissertation chair and major advisor, for her unfailing support and encouragement; Dr. Fournier, and Dr. Weber for their guidance; Dr. Robinson for the much appreciated support she gave me, for her careful attention to detail, and for her friendship. Special thanks to Lendell Nye for all his prompt responses and sagacious insight with the statistical analysis. A warm thanks to Mike Parr for his computer expertise and availability at unorthodox times of the day and night. To Elaine Porter, for the endless hours she spent typing and retyping, revising the revisions, editing and correcting, cajoling and supporting.

I am grateful to my balcony section, my friends and family that were always there to encourage and support me emotionally, and to never put demands on me that interfered with this project.

To my sons, Craig and Curt, who only remember their mother as being in school, this dissertation is a part of your work as well. To Eddie, who quietly supported and inspired me in this endeavor.

## TABLE OF CONTENTS

I.	MANUSCRIPT . . . . .	Page 1
	Abstract. . . . .	2
	Introduction. . . . .	3
	Conceptual Framework. . . . .	3
	Adolescent Family Life Satisfaction . . . . .	5
	Adolescent Stress. . . . .	6
	Coping Patterns. . . . .	7
	Detrimental Coping. . . . .	8
	Social Supports . . . . .	8
	Religiosity . . . . .	9
	Demographic Variables. . . . .	11
	Methods . . . . .	11
	Procedure and Sample . . . . .	11
	Measures. . . . .	12
	Adolescent Family Life Satisfaction . . . . .	12
	Adolescent Stress. . . . .	13
	Adolescent Coping. . . . .	14
	Religiosity. . . . .	14
	Results . . . . .	15
	Examination of the Model Parameter Estimates. . . . .	15
	Discussion. . . . .	19
	Conclusion. . . . .	21
	References. . . . .	23
	Tables. . . . .	30
	Figures . . . . .	33
	APPENDIX A - LITERATURE REVIEW. . . . .	35
	Introduction and Rationale. . . . .	37
	Theoretical or Conceptual Framework . . . . .	40
	ABCX Model . . . . .	40
	Crisis . . . . .	43
	Strong Families. . . . .	44
	Vulnerable Families. . . . .	46
	Demographic Factors . . . . .	48
	Age. . . . .	49
	Gender . . . . .	50
	Sources of Stress for Adolescents . . . . .	55

	Page
Adolescent Coping . . . . .	58
Seeking Diversions . . . . .	62
Social Supports. . . . .	65
Religiosity. . . . .	66
Self-Reliance. . . . .	68
Adolescent Family Life Satisfaction . . . . .	71
APPENDIX B - METHODS . . . . .	74
Procedures and Sample . . . . .	74
Measurement . . . . .	75
Adolescent Stress. . . . .	76
Adolescent Family Life Satisfaction . . . . .	78
Adolescent Coping. . . . .	79
Religiosity. . . . .	81
LISREL Modeling . . . . .	82
Model Specification . . . . .	84
Testing and Revising the Model . . . . .	86
Results . . . . .	87
Examination of the Parameter Estimates. . . . .	89
Summary of the Tests of the Hypotheses. . . . .	91
Discussion. . . . .	94
Conclusion. . . . .	97
Tables. . . . .	99
APPENDIX C - REFERENCES . . . . .	104
APPENDIX D - INSTRUMENTS USED IN THE STUDY. . . . .	122
APPENDIX E - COVER LETTER, PERMISSION FORMS AND CORRESPONDENCE, AND INSTITUTIONAL REVIEW BOARD FORM. . . . .	129

LIST OF TABLES		
Table		Page
1.	Correlation Matrix, Means, and Standard Deviations . . . . .	30
2.	Measurement Model Parameters Maximum Likelihood Method . . . . .	31
3.	LISREL Parameters Estimates Using Maximum Likelihood Method . . . . .	32
4.	Demographic Characteristics of the Sample . .	99
5.	Measures Used in Study . . . . .	102
6.	Original Model, Correlation Matrix, Means and Standard Deviations . . . . .	103

## LIST OF FIGURES

Figure	Page
1. Original Model of Family Stress, Adolescent Coping, and Adolescent Family Life Satisfaction. . . . .	33
2. Revised Model of Family Stress, Adolescent Coping, and Adolescent Family Life Satisfaction. . . . .	34



Family Stress, Adolescent Coping,  
and Adolescent Family Life Satisfaction

Erlene Carson

Department of Family Relations  
and Child Development

Oklahoma State University

Author Note: This article was written as part of the fulfillment of requirements for the doctoral dissertation in Family Relations and Child Development, and appears within the context of the dissertation titled: FAMILY STRESS, ADOLESCENT COPING, AND ADOLESCENT FAMILY LIFE SATISFACTION. This article will be submitted to the journal, Journal of Marital and Family Therapy.

### Abstract

The purpose of this study was to examine how adolescent stress and coping related to adolescent family life satisfaction. A structural equation model was developed and tested. The results indicate that adolescent family life satisfaction is enhanced by a strong social support system and decreased by detrimental coping mechanisms such as avoidance or ventilating feelings. In addition, as stress increases adolescents more generally chose detrimental coping behaviors. Implications for further research and practice are discussed.

## Introduction

The adolescent phase of the family life cycle involves addressing the developmental tasks associated with adolescence, combined with stresses related to other family members and the overall family unit. Examples of adolescent stressors include developing a sense of identity, developing a balance between separation and connection in the family, establishing a peer group (Patterson & McCubbin, 1987). While considerable diversity occurs regarding the types of stressors encountered, adolescent well-being cannot be understood by simply examining the stressors encountered. Instead, the relationship between adolescent stress and well-being can be expected to be buffered by the types of coping used by the youth. Coping strategies might include calling upon social support, avoiding problems, seeking diversions, relaxing, or ventilating feelings (Patterson & McCubbin, 1987). To examine the relationship between adolescent stress, coping style, and one dimension of adolescent well-being (adolescent family life satisfaction), a structural equations model was developed and tested.

## Conceptual Framework

One conceptual model that is useful for examining adolescent stress, coping, and well-being is the ABC-X Model

of Family Stress (Hill, 1958). This model proposes that the combination of a stressor event (A), resources for action and the family's ability to cope (B), the family's appraisal of the stressor event and perception of the situation (C), combine to produce (X), the impact on the family unit and members. The original model was modified by McCubbin and Patterson (1983a) as the Double ABC-X Model. This modification explained a more complex nature of family crisis, that accounts for the "pile-up" of stress that can result from multiple stressors. The pile-up (Aa) is important in predicting family adjustment. Specifically, if an excessive number of life changes occur within a brief time, the family and individual family members may emerge from the crisis at a lower level of functioning. While they might be able to deal with one or two stressors, the pile-up can deplete resources to cope (McCubbin & McCubbin, 1987; Burr, 1973; Lavee, McCubbin, & Olson, 1987).

The Double ABC-X Model defines coping as the specific cognitive and/or behavioral response of a family or individual, including the adolescent. Resources are what one has, while coping is what one does. Coping often involves utilizing resources in order to meet demands. Coping is a bridging concept in this model that involves the interaction of resources and definitions or appraisals in response to the pile-up of demands (Patterson & McCubbin, 1987).

### Adolescent Family Life Satisfaction

Recent research shows that according to McCubbin and Patterson (1983b), one element of family adaptation is the level of well-being among individual family members, including adolescents. Adolescent family life satisfaction is defined as the adolescent's evaluation of their family context as a supportive context for progressing through developmental changes (Henry, 1994). Previous research shows that adolescents who are more satisfied with their families are able to respond in an adaptive manner to the changes associated with adolescence (Burke, 1989; Olson, McCubbin, Barnes, Larsen, Muxem, & Wilson, 1983). Further, adolescent satisfaction with family life is positively related to compliance with parental expectations (Schumm, Bugaighis, Jurich, & Bollmon, 1986), reports of quality of life (Schumm, McCollum, Bugaighis, Jurich, & Bollmon, 1986), and emotional disclosure to parents (Papini, Farmer, Clark, Micka, & Barnett, 1990). While Henry (1994) found that both family system characteristics and parental behaviors relate to adolescent family life satisfaction, minimal consideration has been given to how adolescent perceptions of family stress and adolescent coping patterns relate to satisfaction with family life.

### Adolescent Stress

Stress is defined in terms of the felt inability to meet demands, either within families or individuals (e.g.,

interpretation of event) or within the environment (events), that affect families or individuals (McCubbin & Patterson, 1991). Johnson (1986) found that the greater the number of stressful events experienced within a given period of time, the greater the stress experienced.

Schellenbach and Guerney (1987) suggest factors that characterize families at-risk for high-level stress: (a) family communication patterns involving excessive authority or permissiveness enforced by abusive punishment; (b) a high level of recent family conflict; (c) adolescents who present behavioral challenges to parents; (d) adolescents who are themselves experiencing stressful events, especially alcohol or drug abuse; and (e) parents who respond with more discipline and less support to high-risk adolescents. Further, Baer, Garnezy, McLaughlin, and Pokorny (1987) found that subjects reported more alcohol use in relation to more life events, more daily hassles, and more conflict in the family.

The frequency and intensity of life events were distinct measures and of equal importance when assessing stress among adolescents (Mullis, Youngs, Mullis, & Rathge, 1993). Koch-Hattem, Hattem, and Plummer (1987) found that a pile-up of stressors, role inflexibility, rules prohibiting emotional expression, family income, and perceived severity of the stressor influenced variance in negative family mental-health outcomes. However, when adolescents hold

models of relationships with parents that are characterized by anger or insecurity and face increased pressures to seek autonomy, a high risk of problem behavior ensues (Allen, Aber, & Leadbeater, 1990).

### Coping Patterns

Coping refers to the family's strategies, patterns, and behaviors used to manage the situation and initiate efforts to resolve the hardships created by the stressors (McCubbin & McCubbin, 1991). Most of the coping patterns address more than one function. Similarly, the coping pattern of engaging in demanding activity is primarily directed at increasing resources available to the adolescent, but may also help manage tension. The coping patterns which focus on appraisal or altering meaning, that is one's perception of the situation, include being humorous and developing self-reliance. However, these coping behaviors also include direct action behaviors to increase one's resources (Patterson & McCubbin, 1991).

The coping process does not appear to be unidimensional, but rather multi-dimensional in that any given coping behavior may be focused on a pile-up of demands and it may simultaneously serve more than one function (e.g., solve problems and manage emotions) (Patterson & McCubbin, 1991, p. 247).

Detrimental coping. Patterson and McCubbin (1987) identified four patterns focused primarily on avoidance: ventilating feelings, seeking diversions, relaxing, and avoiding problems. Coping behaviors associated with ventilating feelings and avoiding problems are usually evaluated as undesirable.

Brown, Lohr, and McClenahan (1986) revealed that peers were seen as encouraging misconduct or detrimental coping less than other types of behavior. Female subjects reported stronger peer pressure than males toward conformity and social involvement. Associations between perceived pressures and personal attitudes or behavior were significant but modest and were sometimes mediated by gender or grade level.

Social supports. Several coping patterns (i.e., developing social support, solving family problems, seeking spiritual support, investing in close friendships, and seeking professional support) involve talking to other people as a way to discover solutions to problems and increase social support, which is considered a direct action (Patterson & McCubbin, 1987). However, most of these same behaviors have the potential to reduce tension and may directly lead to altered meanings of the stress.

One coping approach used by adolescents is seeking involvement in interpersonal relationships with friends, siblings, parents, and other adults. Shulman, Seiffge-



Krenke, and Samet (1987) found that a sense of lack of family support or an over-controlling family climate was related to a higher level of dysfunctional or detrimental coping. Adolescent perceptions of the family climate were related to the nature of the task or situation the adolescent encounters.

The adolescents' natural tendency is to turn to peers as part of their coping repertoire, particularly in the face of adolescent-family stressors and strains. Family, the adolescents' close friendships, and socially supportive networks can be an effective means of prevention. Tolin (1988) suggested that a family's ability to support each other, especially during transitions, and stress, associated with adolescence relates to a lower level of antisocial behavior.

Adolescents have the potential to provide social support to their siblings (Goetting, 1986). Lamb (1982) observed that siblings commonly become primary sources of emotional support that typically persist through adolescence and young adulthood.

Religiosity. Strong religious faith is related to high family cohesiveness (Bahr & Chadwick, 1985) which can help adolescents meet crises, partly because it provides a positive way of looking at suffering (Olson et al., 1983; McCubbin & McCubbin, 1989). Stinnett and Defrain (1985) stated that the spiritual dimension of the self is one of

the important elements of success and strength in families.

These authors further stated that religiosity can be manifested in various ways: faith in God, faith in humanity, ethical behavior, unity with all living things, concern for others, or religion. Spiritual wellness is illustrated by strong families as a unifying force, a caring center within each person that promotes sharing, love, and compassion for others. Stinnett and DeFrain (1985) state that spirituality provides individuals with feelings that they are a part of something bigger than self (a part of an eternal spirit or of humanity) that gives them perspective, hope, optimism, and confidence.

Patterson and McCubbin (1987) posit that males may seek spiritual support more often than females, yet seeking spiritual support is ranked fifth for males and sixth for females, suggesting that seeking spiritual support is used moderately to cope or adapt to stress.

Gender differences have been reported in coping strategies. Females experienced greater family role strain and reported using greater social support and ventilation of feelings when compared with males (Bird & Harris, 1990). Further, females exhibited greater emotional self-disclosure to parents and peers than did males (Papini et al., 1990).

#### Demographic Variables

Although satisfaction is measured in a variety of ways, a common element is the inclusion of gender differences in

the study of life satisfaction outcomes (Benson, Harris, & Rogers, 1992). However, some studies report greater life satisfaction by males than females (Andrews & Withey, 1976; Broman, 1991; Campbell, Converse, & Rogers, 1976; Wilcox, 1981). Accordingly, a gender difference would be expected in social support as a coping pattern and life satisfaction. Based upon these ideas, the original model was developed and depicts the hypothesized relationships among the variables (see Figure 1).

---

Insert Figure 1 about here

---

## METHODS

### Procedure and Sample

Subjects for this study were ninth to twelfth grade students at a public high school in a metropolitan community in the southwestern United States. Three hundred thirty eight (338) self-report questionnaires were distributed in a school of approximately 1150 students. From this number, 312 (92%) students participated in the study resulting in 29% of the total number of students.

The mean age of the sample was 15.9, ranging from 14 to 20. Gender was represented by 160 (51%) males and 152 (49%) females. Racial distribution follows: 188 (60%) Caucasian,

72 (23%) African American, 25 (8%) Native American, 11 (4%) Hispanic, 9 (3%) Asian, and 7 (2%) other. The subjects received a pair of sunglasses for participating in the study.

### Measures

The self-report questionnaire used in this study includes previously established instruments and a standard fact sheet to assess the demographic variables.

#### Measure of Adolescent Family Life Satisfaction

The Adolescent Family Life Satisfaction Index was used to assess the extent to which adolescents were satisfied in relations with their parents and siblings (Henry, Ostrander, & Lovelace, 1992). This 13-item index was scored on a 5-point Likert type scale which ranged from, 1 = "strongly disagree" to 5 = "strongly agree." The first seven sample questions regarding parent(s)/ stepparent(s)/ guardian(s) include: "I am satisfied with how much my parent(s) approve of me and the things I do. I am satisfied with the way my parent(s) want me to think and act." Questions 8 through 13 relate to satisfaction with siblings in the home which include: "I am satisfied with the amount of influence my brothers and/or sisters have over my actions." "I am satisfied with the overall relationship(s) with my brothers and/or sisters." The parent (7 items) and sibling (6 items) subscales were each summed for scoring. Using the present

data, the internal consistency reliability coefficient (Cronbach's alpha) for these subscales were .84 for the parents and .88 for siblings. Both the actual and possible range of scores were seven to thirty-five for the parents and six to thirty for the siblings.

#### Measure of Adolescent Stress

The Adolescent Life Events Checklist is a 42-item instrument designed to assess adolescent perceptions of the level of normative and non-normative family stress experienced during the past 12 months (Fournier, 1981). The overall life events were divided into sexual, family, personal, and school subscales. ALEC has four coded response options: 0 = "No, life event did not occur;" 1 = "Yes, life event occurred but was not stressful;" 2 = "Yes, life event occurred and was stressful;" and 3 = "Yes, life event occurred and was highly stressful." To measure the perceived stress a raw score response of 0 or 1 was coded statistically as zero (0), that is, not stressful. A raw score response of 2 or 3 was coded as one (1), a stressful event. The total sum of the recoded items represents the total stress score.

The Adolescent Life Events Checklist asks the subjects to check the events which have occurred during the past year and rate the amount of stress experienced with each event. Sample events are: "Left home without permission" and "Money problems experienced by the family."

Using the present data, the following internal consistency reliability coefficients (Cronbach's alpha) were established: .88 for the total scale; .71 for the sexual subscale; .75 for the family subscale; .75 for the personal subscale; and .61 for the school subscale.

#### Measures of Adolescent Coping

##### Adolescent Coping Orientation for Problem Experiences

(A-COPE) is a 54-item scale that measures adolescent reports of the frequency of using various coping behaviors. The 5-point Likert scale ranged from 1 = "never" to 5 = "most of the time." The detrimental coping (19 items), social support (16 items), and self-reliance (6 items) subscales were used for the present study. The scores for each scale resulted from summing the respondents' score within each coping behavior. Cronbach alphas for the present data are: avoiding problems, .62; ventilating feelings, .72; developing social supports, .70; solving family problems, .72; investing in close friends, .64; and seeking professional help, .43.

#### Measure of Religiosity

The scales for intrinsic and extrinsic religiosity are shortened versions of I-E (intrinsic and extrinsic) scales initially developed by Gorsuch and Venable (1983) that were extended one item by Schumm, Hatch, Hevelone, and Schumm (1991) for a total of 11 items. Examples of intrinsic items are "I have often had a strong sense of God's presence" and

"My religion is important to me because it answers many questions about the meaning of life." Five items from Gorsuch and Venable's "age universal" I-E scale represent intrinsic religiosity, while five items represent extrinsic religiosity. The subjects were asked, "to what extent do you agree or disagree with the following statements about society, the church/temple, and your own beliefs?" Schumm et al. (1991) added an item to assess a specifically Christian intrinsic religiosity: "My relationship with Christ is a vitally important part of my life." The 5-point Likert scale ranged from "strongly disagree" to "strongly agree." Schumm (1994) reported Cronbach's alpha coefficient of .80, while the present data yielded an alpha of .66, for the overall scale. The intrinsic religiosity subscale yielded an alpha of .79, while the extrinsic religiosity subscale yielded an alpha of .54. Due to low reliability for the extrinsic religiosity subscale, it was excluded from the analyses.

## Results

### Examination of the Model Parameter Estimates

The original "full model" included age and gender. Age was dropped because age was not significantly related to any coping strategy or adolescent family life satisfaction. The age distribution was 14 to 20, 66% of the sample was 15 and 16 years old. The mean age was 15.9. Gender was

significantly related to social support and marginally to detrimental coping, but not significantly related to adolescent family life satisfaction. Gender was left out of the model because of the unacceptably high correlation with one of the indicators of stressful life events (i.e., LESEX had an excessive correlation between error terms).

Evaluation of the structural parameters suggested that the model could be improved by discarding self-reliance. Self-reliance had a non-significant relationship with adolescent family life satisfaction. Seeking diversions and relaxing within detrimental coping were not highly related to avoidance or ventilating feelings, and not included in the revised model.

---

Insert Figure 2 about here

---

The "reduced model" of adolescent family life satisfaction is depicted in Figure 2. This model proposed that adolescent family life satisfaction follows an accumulation of adolescent stressful life events and adolescent coping mechanisms. Adolescent stressful life events include sexual, family, personal, and school interactions. Coping mechanisms include detrimental coping (i.e., the use of avoidance or ventilating feelings); social supports (i.e., developing social supports, solving family problems, investing in close friends, and seeking



professional support); and the use of an intrinsic religion. Adolescent family life satisfaction was divided into satisfaction with parents and siblings. The descriptive statistics and correlation matrix for these indicator variables are shown in Table 1.

---

Insert Table 1 about here

---

Analysis of the reduced model, as specified in Figure 1, indicated that some constructs may not fit the data sufficiently well. Although, the chi-square measure of goodness-of-fit, with the 59 degrees of freedom, was 143.81 ( $p < .01$ ), indicating a potential discrepancy between the data (variance-covariance matrix) and the relations specified in the model, the Goodness-of-Fit Index (GFI) was 0.918, indicating an overall satisfactory fit of the data with the specified model.

The parameter estimates are presented in Table 2 and Table 3. Table 2 depicts the maximum-likelihood estimates of the measurement model. The results of the structural model estimates are shown in Table 3.

---

Insert Tables 2 & 3 about here

---

The four factors of stress (i.e., sexual, family,

personal, and school) or Lambda X constitute an identifiable construct. The t-values of the indicators of adolescent stressful life events for this study are: personal = 9.65, family = 9.33, school = 8.31, and sexual = 1.0 a load value. T-values greater than or equal to 2.0 are considered significant factor loadings.

Gamma 1 (.63) suggests that as stress increased subjects more generally chose detrimental coping behaviors, compared to Gamma 2 (.22) of social support. Gamma 3 (-.13) suggests that as stress increased subjects were less likely to be religious, however -.13 is not statistically significant. Gamma 4 (-.12) suggests there was no significant direct effect (controlling for coping strategy) between stress and AFLS.

The total effect of stress on AFLS was -.40, and the t-value was -3.65. The value of -.40 (-.28 indirect and -.12 direct) suggests that stress and family satisfaction have a significant, but indirect relationship based on coping strategy. As perceived stress increases, family satisfaction decreases. However, the choice of coping strategy can account for and buffer the impact of stress on adolescent family life satisfaction.

The indirect effect is the combined effect of Gamma 1, Gamma 2, and Gamma 3 multiplied by Beta 1, Beta 2, and Beta 3. The indirect effect of stress on AFLS was -.28. This was primarily detrimental coping and secondarily social

support. As shown in Table 3, Beta 1 (detrimental coping) was  $-.60$ , indicating a negative relationship with AFLS. The more that detrimental coping strategy was used, the less family satisfaction the adolescent reported. Beta 2 (social support) was  $.54$ , indicating a positive relationship with AFLS. The more social support strategy is used, the greater adolescents perceive family satisfaction. Beta 3 (religion) was  $.12$ , which is not significant.

### Discussion

This study examined the relationship between family adolescent coping behaviors, and adolescent family life satisfaction, using family stress theory. Stressful life events were measured as the subjects' individual perceptions, and patterns of coping behaviors used were resources. Detrimental coping, social supports, and religion are conceptualized by stress theory as intervening factors between stressful life events and adolescent family life satisfaction (i.e., stress and adaptational outcomes).

The results indicate coping serves as a mediating factor between life events and family life satisfaction. Specifically, the type of coping strategy can reduce or increase the impact of stress on adolescent family life satisfaction. These findings are congruent with prior research (Schellenbach & Guernsey, 1987; Baer et al., 1987; Johnson, 1986) that suggest parenting factors and adolescent

behaviors which characterize families at-risk. There appear to be two issues: the difference between a mediator that exacerbates (detrimental coping) and a stress-buffer, which reinforces (social support). Detrimental coping helps "explain" how stress reduces adolescent family life satisfaction, yet social support may "block" the potential negative impact of stress events on Adolescent Family Life Satisfaction.

The results of this study indicate that family satisfaction is enhanced by perceptions of a strong social support system and decreased by reports of detrimental coping mechanisms, such as avoidance or ventilating feelings. Social support has a stress-buffering role because this coping strategy reduces the total effect of stress on family life satisfaction. These results are consistent with Henry's (1994) findings that adolescent's perceptions of parental support were positively related to family life satisfaction, while perceptions of parental punitiveness were negatively related to adolescent family life satisfaction.

None of the four categories (i.e., sexual, school, personal, or family) of stressful life events appeared to be more stressful than the other. The perception of stress in sexual activity, family, personal, and school was relatively equal. These findings collaborate with Koch-Hattem et al. (1987) and Allen's et al. (1990) findings that the pile-up

of stressors and the overall functioning of the family, such as, roles, rules, parenting styles, and perceptions were ultimate sources for stress. Hence, the coping method used does influence adolescent family life satisfaction. The direct effect of stress on adolescent family life satisfaction was non-significant, yet the indirect effect was significant.

There is evidence that family satisfaction could be improved among adolescents as their social support system improved. The social supports in this study included family, friends, seeking professional help, and helping to solve family problems. In other words, having the resources of family, friends, and professionals available to work through varying life events may improve adolescent's family life satisfaction.

This study suggests that as detrimental coping increased, adolescent family satisfaction decreased. Detrimental coping included avoidance and ventilating feelings. Avoidance included the use of drugs, alcohol, smoking, staying away from home as much as possible, and ignoring problems. Ventilating feelings included blaming, yelling, swearing, and complaining to family and friends.

### Conclusion

Stress appears to be the factor that decreases the use of detrimental coping or increases social supports which

enhance adolescent family life satisfaction. In other words, this study indicates that the coping method used has an impact upon family life satisfaction. Adolescent family life satisfaction was enhanced by the use of social supports, and suggests that social support acts as a stress-buffer. When detrimental coping was used there was a negative impact upon family life satisfaction: Thus, detrimental coping acted as an intervening or mediating factor between stress and family life satisfaction. There is evidence that family satisfaction could be improved among adolescents as their social support system improved.

Another important finding is the relationship between stress and detrimental coping. This study suggests that, as stress increased, adolescents more generally chose detrimental coping behaviors. Again, professionals could expect to see increased adolescent family life satisfaction in adolescents who decrease detrimental coping and increase social support.

Because some of the model's modifications were made post hoc and derived empirically (rather than theoretically), it is necessary for future research to cross-validate the model with other samples of adolescents. Cross-validation of the model was not done because the sample size did not allow for cross-validation.

## References

- Allen, J. P., Aber, J. L., & Leadbeater, B. J. (1990). Adolescent problem behaviors: The influence of attachment and autonomy. Psychiatric Clinics of North America, 13(3), 455-467.
- Andrews, F. M., & Withey, S. B. (1976). Social indicators of well-being: Americans' perception of life quality. New York: Plenum.
- Baer, P. E., Garmezy, L. B., McLaughlin, R. J., & Pokorny, A. D. (1987). Stress, coping, family conflict, and adolescent alcohol use. Journal of Behavioral Medicine, 10(5), 449-466.
- Bahr, H. M., & Chadwick, B. A. (1985). Religion and family in Middletown, USA. Journal of Marriage and the Family, 47(2), 407-414.
- Benson, M. J., Harris, P. B., & Rogers, C. S. (1992). Identity consequences of attachment to mothers and fathers among late adolescents. Journal of Research on Adolescence, 2(3), 187-204.
- Bird, G. W., & Harris, R. L. (1990). A comparison of role strain and coping strategies by gender and family structure among early adolescents. Journal of Early Adolescence, 10(2), 141-158.

- Broman, C. L. (1991). Gender, work-family roles, and psychological well-being of blacks. Journal of Marriage and the Family, 53, 509-520.
- Brown, B. B., Lohr, M. J., & McClenahan, E. L. (1986). Early adolescents' perceptions of peer pressure. Journal of Early Adolescence, 6(12), 139-154.
- Burke, J. W. (1989). Parent-adolescent relationships and family systems functioning. Unpublished doctoral dissertation, Oklahoma State University, Stillwater, OK.
- Burr, W. R. (1973). Theory construction and the sociology of the family. New York: Wiley.
- Campbell, A., Converse, P. E., & Rogers, W. L. (1976). The quality of American life: Perceptions, evaluations, and satisfaction. New York: Russell Sage Foundation.
- Fournier, D. G. (1981). Adolescent Life Events Check-list (ALEC). Unpublished manuscript, Oklahoma State University, Family Relations and Child Development, Stillwater, OK.
- Goetting, A. (1986). The developmental tasks of siblingship over the life cycle. Journal of Marriage and the Family, 48, 703-714.
- Gorsuch, R. L., & Venable, G. D. (1983). Development of an "age universal" I-E scale. Journal for the Scientific Study of Religion, 22, 181-187.



- Henry, C. S. (1994). Family system characteristics, parental behaviors, and adolescent family life satisfaction. Family Relations, 43, 447-455.
- Henry, C. S., Ostrander, D. L., & Lovelace, S. G. (1992). Reliability and validity of the adolescent family life satisfaction index. Psychological Reports, 70, 1223-1229.
- Hill, R. (1958). Generic features of families under stress. Social casework, 49, 139-150.
- Johnson, J. H. (1986). Life events as stressors in childhood and adolescence. Beverly Hills: Sage.
- Koch-Hattem, A., Hattem, D. M., & Plummer, L. P. (1987). The role of mental-health resources in explaining family adaptation to stress: A preliminary analysis. Family Systems Medicine, 5(2), 206-219.
- Lamb, M. E. (1982). Sibling relationships across the life span: An overview and introduction. In M. E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 1-11). Hillsdale, NJ: Lawrence Erlbaum.
- Lavee, Y., McCubbin, H. I., & Olson, D. H. (1987). The effect of stressful life events and transitions on family functioning and well-being. Journal of Marriage and the Family, 49(4), 857-873.

- McCubbin, H., & McCubbin, M. (1987). Family stress theory and assessment: The T-Double ABCX Model of family adjustment and adaptation. In H. McCubbin & A. Thompson (Eds.), Family assessment inventories for research and practice (pp. 3-25). Madison: University of Wisconsin, Madison.
- McCubbin, M. A., & McCubbin, H. I. (1991). Family stress theory and assessment: The resiliency model of family stress, adjustment, and adaptation. In H. McCubbin & A. Thompson (Eds.), Family assessment inventories for research and practice (pp. 1-32). Madison: University of Wisconsin, Madison.
- McCubbin, M. A., & McCubbin, H. I. (1989). Theoretical orientations to family stress and coping. In C. Figley (Ed.), Treating families under stress (pp. 3-43). New York: Brunner/Mazel.
- McCubbin, H. I. & Patterson, J. M. (1983a). Family stress and adaptation to crisis: A Double ABCX Model of family behavior. In D. H. Olson & B. C. Miller (Eds.), Family studies review yearbook (Vol. 1, pp. 87-106). Beverly Hills: Sage.
- McCubbin, H. I. & Patterson, J. M. (1983b). Family transitions: Adaptation to stress. In H. I. McCubbin & C. R. Figley (Eds.), Stress and the family: Coping with normative transitions (Vol. 2, pp. 5-25). New York: Brunner/Mazel.

- McCubbin, H. I. & Patterson, J. M. (1991). FILE -- Family inventory of life events and changes. In H. McCubbin & A. Thompson (Eds.), Family assessment inventories for research and practice (pp. 79-98). Madison, WI: University of Wisconsin.
- Mullis, R. L., Youngs, Jr., G. A., Mullis, A. K., & Rathge, R. W. (1993). Adolescent stress: Issues of measurement. Adolescence, 28(110), 267-279.
- Olson, D., McCubbin, H., Barnes, H., Larsen, A., Muxem, A., & Wilson, M. (1983). Families: What makes them work. Beverly Hills: Sage.
- Papini, D. R., Farmer, F. F., Clark, S. M., Micka, J. C., & Barnett, J. K. (1990). Early adolescent age and gender differences in patterns of emotional self-disclosure to parents and friends. Adolescence, 25(100), 959-976.
- Patterson, J., & McCubbin, H. (1991). A-COPE -- Adolescent coping orientation for problem experiences (Research Instrument). In H. McCubbin & A. Thompson (Eds.), Family assessment inventories for research and practice (pp.233-252). Madison, WI: University of Wisconsin.
- Patterson, J. M., & McCubbin, H. I. (1987). Adolescent coping style and behaviors: Conceptualization and measurement. Journal of Adolescence, 10(2), 163-186.

- Schellenbach, C. J., & Guerney, L. F. (1987). Identification of adolescent abuse and future intervention prospects. Journal of Adolescence, 10(1), 1-12.
- Schumm, W. R. (1994). Personal interview.
- Schumm, W. R., Bugaighis, M. A., Jurich, A. P., & Bollmon, S. R. (1986). Example and explanation as predictors of adolescent compliance with parental instructions. Journal of Social Behavior and Personality, 1, 465-470.
- Schumm, W. R., Hatch, R. C., Hevelone, J., & Schumm, K. R. (1991). Attrition and retention among Christian Church (Disciples of Christ) congregations in three metropolitan regions: A mail survey of 1,149 active and inactive members. In D. Newell Williams (Ed.), A case study of mainstream protestantism (pp. 521-553). Grand Rapids, MI: William B. Eerdmans.
- Schumm, W. R., McCollum, E. E., Bugaighis, M. A., Jurich, A. P., & Bollman, S. R. (1986). Characteristics of the Kansas Family Life Satisfaction Scale in a regional sample. Psychological Reports, 58, 975-980.
- Shulman, S., Seiffge-Krenke, I., & Samet, N. (1987). Adolescent coping style as a function of perceived family climate. Journal of Adolescent Research, 2(4), 367-381.
- Stinnett, N., & DeFrain, J. (1985). Secrets of strong families. Boston: Little, Brown.

- Tolin, P. (1988). Socioeconomic, family, and social stress correlates of adolescent antisocial and delinquent behavior. Journal of Abnormal Child Psychology, 16(3), 317-331.
- Wilcox, A. R. (1981). Dissatisfaction with satisfaction: Subjective social indicators and the quality of life. In D. F. Johnston (Ed.), Measurement of subjective phenomena (pp. 1-20). Washington, DC: Department of Commerce. Special Demographic Analysis CDS-80-3.

Table 1. CORRELATION MATRIX, MEANS, AND STANDARD DEVIATIONS

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
Stress Event													
1. Sexual	1.00												
2. Family	.53	1.00											
3. Personal	.53	.65	1.00										
4. School	.40	.52	.57	1.00									
Detrimental Coping													
5. Avoidance	.23	.28	.38	.30	1.00								
6. Ventilating	.16	.16	.23	.18	.29	1.00							
Social Support													
7. Social Support	.27	.23	.18	.14	.12	.24	1.00						
8. Solving Prob	-.07	-.10	-.09	-.07	-.16	.09	.40	1.00					
9. Friends	.14	.09	.10	.04	.06	.10	.36	.19	1.00				
10. Seek Profess	.17	.15	.10	.12	.23	.15	.18	.27	.03	1.00			
Religion													
11. Intrinsic	-.04	-.05	-.07	-.06	-.21	-.07	.16	.30	.15	.04	1.00		
Adol. Family Satis.													
12. Parents	-.17	-.21	-.20	-.19	-.30	-.14	.08	.38	.12	.10	.24	1.00	
13. Siblings	-.16	-.10	-.04	.01	-.10	-.07	.08	.22	.04	.07	.06	.38	1.00
Mean	1.73	3.26	3.10	1.09	2.34	2.78	3.40	2.64	3.40	1.54	3.28	2.98	3.18
Std. Deviations	1.72	2.60	2.61	1.16	0.84	0.82	0.80	0.81	1.16	0.80	0.78	0.90	0.92

N = 227

Table 2. MEASUREMENT MODEL PARAMETERS  
(MAXIMUM LIKELIHOOD METHOD)

Parameter	LISREL Estimate	Standard Error	t-value
Path Coefficients			
LX(1)	1.00*	.00	0.00
LX(2)	1.21	.13	9.33
LX(3)	1.30	.14	9.65
LX(4)	1.03	.12	8.31
LY(1)	1.00*	.00	0.00
LY(2)	.64	.16	4.07
LY(3)	1.00*	.00	0.00
LY(4)	.85	.17	5.16
LY(5)	.61	.14	4.41
LY(6)	.49	.13	3.72
LY(7)	1.00*	.00	0.00
LY(8)	1.00*	.00	0.00
LY(9)	.44	.14	3.11

Note: (\*) Coefficients fixed at 1.0 for identification of construct.

GFI = .92    Chi Sq. (59) = 143.8

All coefficients were significant at  $p < .01$

N=227

Table 3. LISREL PARAMETER ESTIMATES USING  
MAXIMUM LIKELIHOOD METHOD

STRUCTURAL MODEL			
Parameter	LISREL Estimate	Standard Error	t-value
Path Coefficients			
gamma 1	.63	.12	5.5
gamma 2	.22	.10	2.3
gamma 3	-.13	.11	-1.2
gamma 4	-.12	.20	- .6
beta 1	-.60	.26	-2.30
beta 2	.54	.13	4.06
beta 3	.12	.07	1.67

t-values greater than 2.0 indicate significance at  $p < .05$

N=227



Figure 1. Original Model

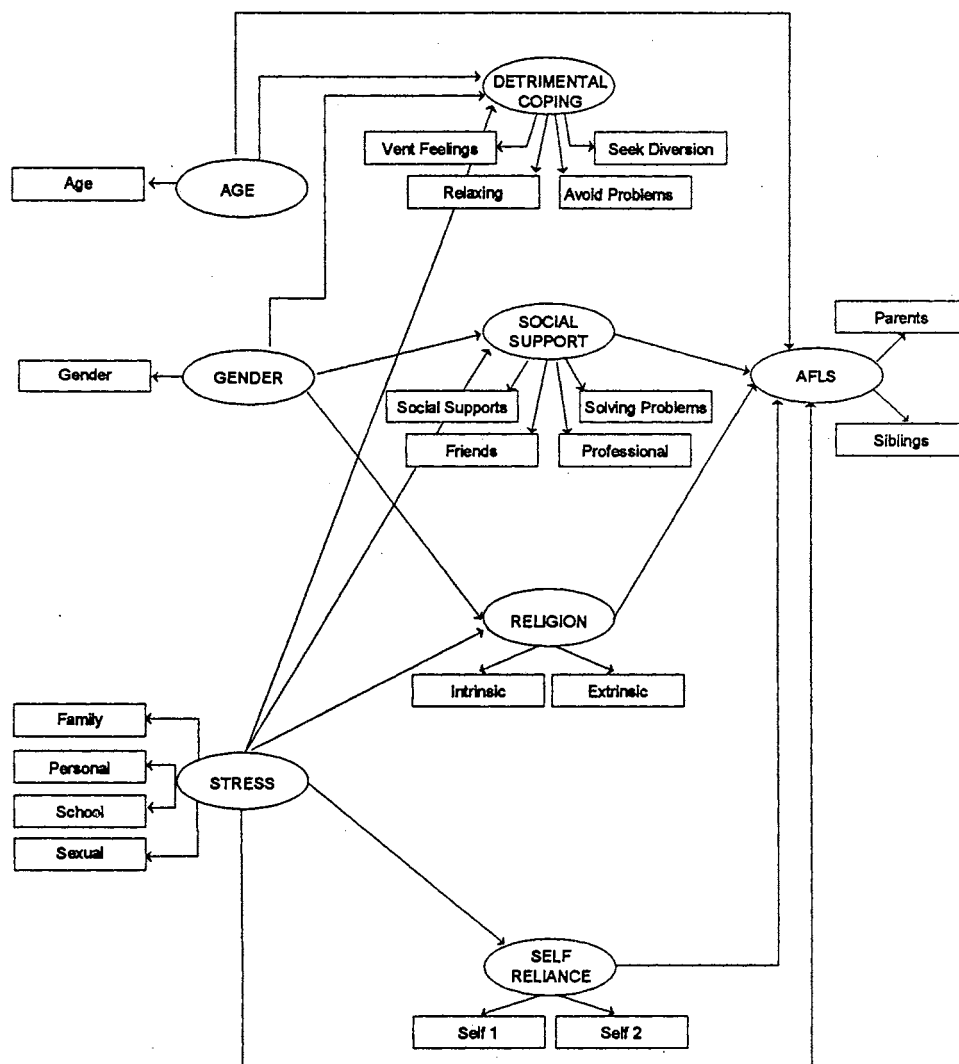
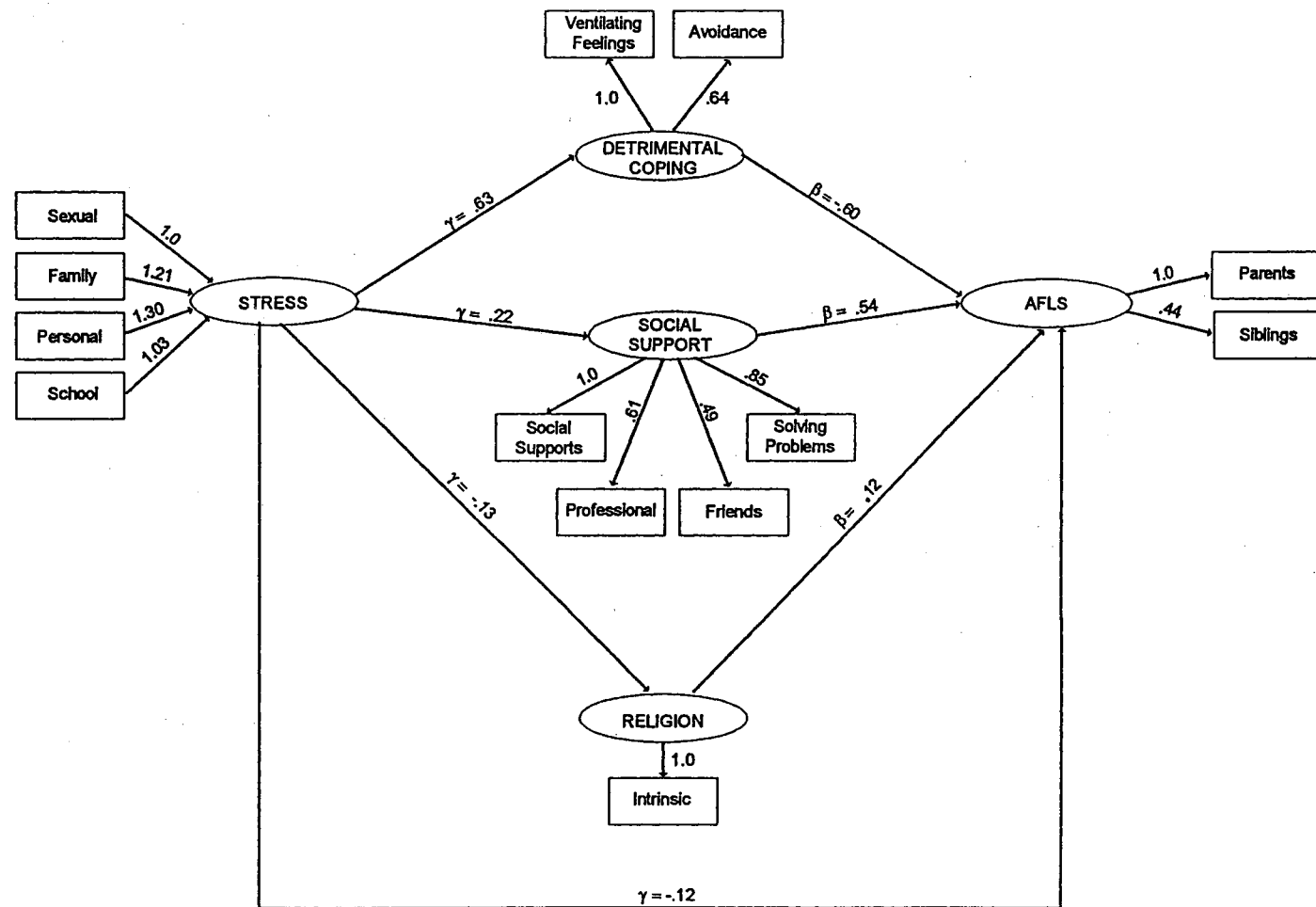


Figure 2. Revised Model



## Appendix A

### Literature Review

#### Introduction and Rational

For the present generation, family life is not simpler, but more complex. The pace is faster and stress is viewed as a normative part of family life (Boss, 1980). Family stress arises from an actual or perceived imbalance of demands and capabilities to which the family must respond (McCubbin & Patterson, 1983a). One source of family stress are the expected or predictable changes that occur as families progress through the family life cycle. Families with adolescent members, for example, face the hardships in the form of intra-family strains related to predictable transitions and movements of family members in and out of the family unit (Olson, McCubbin, Barnes, Larsen, Muxem, & Wilson, 1983), such as when an adolescent leaves home after completing high school. Patterson and McCubbin (1987) noted that the developmental tasks associated with adolescence pose a unique set of stressors and strains, including developing an identity, differentiating from the family while still staying connected, and fitting into a peer group. Because of these expected changes, adolescence traditionally was seen as a period of inevitable emotional turmoil, due in part to these expected or predictable

changes. Consequently, the period of adolescence has been described as one of the most stressful stages of the family life cycle (McCubbin & McCubbin, 1991). Family stress, even expected change, has important implications for the well-being of family members, including adolescents.

Life cycle issues refer to changes over time within families as a consequence of the development of each individual member. Patterson and McCubbin (1991) stated the critical task of adolescence is the transition from family dependence to the need for independence. Haley (1973) stated that major stressors occur at transition points in the family life cycle. Lavee, McCubbin, and Olson (1987) found that life events, combined with transitions and other stressors, intensified intra-family strain. Inter-generational conflicts typically come into focus with the appearance of the emerging, relative autonomy in adolescent and their detachment from their parents (Haley, 1980).

However, throughout life, all families face stress, crises, and transitions. Not all families with adolescents respond to stressors in the same way. Variation in the response relates to variation in adaptation. Families may adapt by making changes in their existing structure which may include modifications in established roles, rules, goals, and/or patterns of interaction (McCubbin & Patterson, 1983c).

Beyond the normative stressors of family life, the

typical American family faces stress related to unpredictable external, internal, and intra-family factors. External stress, for example, includes the economy, crime, natural disasters, community, and global issues. Internal stress includes death, divorce, finances, dual careers, mobility and relocations, drive-by shootings, weapons in school, and gangs. Unpredictable intra-family stress includes tensions between family members about issues such as drugs or adolescent pregnancies.

McCubbin and Patterson (1983a) stated that family stress is an important issue to study for educators and family therapists who are committed to helping families help themselves. If this is true, and Boss (1980) is accurate that life is more complex, then it follows that educators and family therapists must keep abreast of the factors that contribute to effective adaptation of family members. For the most part, adolescents acquire positive strategies for addressing stress from their families and the opportunities provided by families. An opportunity that families provide adolescents is evidenced through the degree of family satisfaction that youth report. Henry (1994) posits that adolescent family life satisfaction serves as a gauge of adolescents' own evaluations of their individual adaptation to their family environments.

According to family stress theory, one category of factors that helps determine how family stress impacts

adolescent well-being is the coping strategies used by adolescents. Kluwin, Blennerhassett, and Sweet (1990) suggest that different coping strategy types could be differentiated by ethnicity, age, and gender. Studies of coping suggest that females report using a broader range of coping patterns than males. Lee, Chan, and Yik (1992) found that males and females use similar coping styles when confronted with difficulties; however, they differed in the frequency with which they might use a particular coping style when dealing with a particular problem.

Therefore, the fast pace and changes in the families of the nineties prompted the following research questions: How do adolescent coping mechanisms vary according to the level of stress? How do stress and coping relate to satisfaction? This study will use the adolescent's satisfaction with family life as an indicator of adolescent adaptation.

It was hypothesized that:

- (1) There would be a positive relationship between the level of stressful life events perceived by adolescents and detrimental coping.
- (2) There would be a negative relationship between the level of stressful life events perceived by adolescents and religiosity.

- (3) There would be a negative relationship between the level of stressful life events perceived by adolescents and social support.
- (4) There would be an negative relationship between the level of stressful life events perceived by adolescents and self-reliance.
- (5) There would be a negative relationship between level of stressful life events (ALEC) and adolescent family life satisfaction (AFLS).
- (6) There would be a negative relationship between reported detrimental coping skills (A-COPE) and adolescent family life satisfaction (AFLS).
- (7) There would be a positive relationship between reported religiosity and adolescent family life satisfaction (AFLS).
- (8) There would be a positive relationship between reported social support (A-COPE) and adolescent family life satisfaction (AFLS).
- (9) There would be a positive relationship between reports of self-reliance (A-COPE) and adolescent family life satisfaction (AFLS).
- (10) Adolescent boys would report more satisfaction with family life than adolescent girls.
- (11) The age of the adolescent would be positively related to adolescent satisfaction with family life.

- (12) Adolescent girls would report engaging in social support as a coping pattern more than boys.
- (13) Adolescent boys would report engaging in detrimental coping patterns more than girls.
- (14) The age of the adolescent would be positively related to the level of stress.
- (15) The age of the adolescent would be positively related to detrimental coping patterns.
- (16) Male adolescents will report more religiosity as a coping pattern than female adolescents.

#### Theoretical or Conceptual Framework

##### ABC-X Model

Reuben Hill (1958) proposed the ABC-X model of family crisis, which states that A (the stressor event), interacting with B (the family's ability to cope with a crisis, their "crisis-meeting resources") and C (the family's appraisal of the stressor event) produces X (the resultant level of crisis). McCubbin and Patterson (1983b) advanced the ABC-X model and proposed the Double ABC-X Model to extend the model to include family adjustment to crises.

In the Double ABC-X Model, the stressor may be singular or there can be multiple stressors (McCubbin & Patterson, 1983b). Simultaneous stressors are referred to as a "pile-up". The pile-up (factor Aa) concept of family-life stressors and strains is important in predicting family



adjustment over the course of family life. An excessive number of life changes and strains occurring within a brief time, such as a year, are more likely to disrupt a family (Olson et al., 1983). Pile-up renders a family more likely to emerge from a crisis at a lower level of effectiveness (McCubbin & McCubbin, 1989). Family pile-up includes stress resulting from normative and non-normative life events.

Prior strains are the residuals of family tension that linger from unresolved stressors or are inherent in ongoing family roles. Stressors and hardships call for family coping and management skills. When family members do not have adequate resources for coping and managing, stress emerges.

Hill (1958) defined a "stressor" as a situation for which the family has had little or no prior preparation and a "crisis" as any sharp or decisive change for which old patterns of behavior are inadequate. A stressor can be defined as "pressure" on the family, and will vary in both kind and degree. Characteristically, the specific nature of the stressor is one factor that affects how a family responds to crisis (McCubbin & Patterson, 1983a).

Some families are vulnerable to the impact of any single stressor and may lack the regenerative power or the resilience to recover and adapt to a family crisis (McCubbin & Patterson, 1983c). However, family stressors are easier to cope with when they are expected, brief, external, and

can be improved.

Stress may never reach crisis proportions if adolescents can use existing resources and define the situation so as to resist change or instability within the family system (McCubbin & Patterson, 1983c). Weak crisis-meeting resources compromise the family's ability to prevent a stressor from creating severe disharmony or disruption (McCubbin & McCubbin, 1989). The personal resources of each family member (e.g., intelligence, problem-solving skills, physical and emotional health), as well as family characteristics (e.g., resistance to change, reticence, lack of verbal skills, etc.) or the family system's resources (e.g., trust, appreciation, and support or family harmony) all contribute to the overall satisfaction with the family and quality of life (Olson et al., 1983; McCubbin & McCubbin, 1989).

Studies have shown that middle-class families often draw upon the resources of extended kin (Clavan, 1978). Grandparents, aunts, or other relatives may help with child rearing in two-career families or single-parent families. This can make a crucial difference in a family's ability to recover from a crisis. Adolescents in single-parent families used family support to cope with stress significantly less often than did adolescents in two-parent families.

A variety of different coping resources, styles, and

specific strategies are important in successfully adapting to stress, including efforts that focus directly on the problem, as well as attempts to deal with adverse emotions associated with stress (Compas, 1987). To facilitate the mediation process and optimally resolve family conflicts involving an adolescent, mediation is aimed at developing a personal sense of responsibility (Stern, Van-Slyck, & Newland, 1992).

### Crisis

Family transitions over the life span predictably create stress and can move the family unit into a state of crisis. A crisis can be defined as a crucial change in the course of events, a turning point, or an unstable condition of affairs. Family crises are turning points that require some change in the way family members think and act in order to meet a new situation (Hansen & Hill, 1964). Crisis (the x factor) denotes the amount of disruptiveness, disorganization, or incapacitation within the family (Burr, 1973). A crisis is characterized by the family's inability to restore stability. Therefore, stress (factor a) may never reach crisis (factor x) proportions if the family is able to use existing resources (factor b) and define the situation (factor c) so as to resist systemic change and maintain family stability (McCubbin & Patterson, 1983b).

According to Capra (1982), the Chinese have a term for crisis, "Wei-Ji", which is a combination of the characters

for "danger" and "opportunity." Although we cannot control the occurrence of many crises, we can decide how to cope with them. Whether or not a family emerges from a crises with a greater capacity for supportive family interaction depends largely on how family members choose to define the crisis.

The definition the family makes of the seriousness of the change in the system influences the vulnerability to stress (Burr, 1973). Several factors influence how family members will define a crisis. One factor is the nature of the precipitating event itself. Another factor that determines how family members define a crisis is the degree of hardship or the kind of problems the stressor creates (Walker, 1985). A third factor determining the family's definition of a crisis is the family's previous experience with crises, particularly those of a similar nature. The family's crisis-meeting resources also affect its appraisal and ability to cope within the situation. Adolescents are helped or hurt by the family functioning, yet there are traits of families that effect adolescent coping resources. Strong family traits help adolescents, while, vulnerable family characteristics place adolescents at risk for handling stress.

#### Strong Families

Choosing a positive outlook helps an individual or a family meet a crisis constructively. Electing to work

toward developing more open, supportive family communication, especially in times of conflict, also helps individuals and families meet crises constructively.

Families that meet a crisis with an accepting attitude, focusing on the positive aspects of their lives, do better than those that feel they have been singled out for misfortune. Families whose members interact openly and supportively meet crises more creatively (Lamanna & Riedmann, 1991; Powers, 1979). Families that are more adaptable and more democratic adjust more positively during crises (Patterson & McCubbin, 1984).

Strong families emphasize mutual acceptance, respect, and shared values. Family members rely on one another for support. Generally, accepting difficulties, strong families work together to solve problems with other family members, each member feeling they have input into major decisions. Strong families foster predictable family routines, rituals, and other times together (McCubbin & McCubbin, 1989). These findings substantiate Stinnett and DeFrain's (1985) findings that family strengths include: (a) the ability to deal with crisis in a positive manner, (b) spending time together, (c) love, (d) appreciation and commitment, (e) respect for individuality, (f) good communication patterns, and (g) a high degree of religious orientation.

### Vulnerable Families

Families who have difficulty coping with crises are less effective in communication and supporting each other than they are in dealing with practical problems. In families in which one member wields authoritarian power, the whole family suffers if the authoritarian leader does not make effective decisions during a crises and allows no one else to move into a position of leadership (Hansen & Hill, 1964).

The average family has some weaknesses as an organization. However, some families are more vulnerable to negative outcomes from crisis-provoking events than are other families. Having a lower sense of common purpose and feeling less in control of what happens to them, the more vulnerable families tend to cope with problems by showing diminished respect or understanding for one another. Hesitant to depend on the family for support and understanding, members may avoid one another.

The vulnerable families are also less experienced in shifting responsibilities among family members and are more resistant to compromise. There is little emphasis on family routines or predictable time together in these families (McCubbin & McCubbin, 1989). To summarize, the more vulnerable families are at risk for greater adolescent problems, and the less vulnerable, or stronger, families are at less risk for problems, and have a greater capacity for

adaptation when problems arise.

The family's management of a stressful situation through its problem-solving and coping skills depends on the family's ability to define the stressor and the situation as manageable components, to identify alternative courses of action, and to initiate steps to ultimately resolve the problem (McCubbin & McCubbin, 1987).

The way in which a family interprets a crisis-precipitating event may have as much or more to do with the members' ability to cope as it does with the characteristics of the event itself (Burr, 1973). Therefore, the stress members' appraisal (factor Cc) of the stress-producing situation plays a major part in buffering the stress (Lavee et al., 1987). A family's outlook can vary from perceiving the transition or change as an opportunity or challenge for growth, or as a disaster for the family. Families who define a problem as their fault suffer more as individuals and also tend to provide less support than families who consider the cause to be external (Farber, 1959; Price-Bonham & Addison, 1978).

As a delimitation of the study, memory may influence the measurement of stress. Jenkins, Hurst, and Rose (1979) found that adults have great difficulty in reporting life change events beyond six months, and it is likely that adolescents will have the same difficulty. This difficulty is greater for perceptions of events as opposed to the mere

remembrance of events. Apparently, adolescent reports of life events beyond six months may be similarly affected when questionnaire data are used. Average and frequency measures of stress may yield more important information than any one measure separately. However, negative and positive stress and the time period of life events seem to be useful dimensions of adolescent stress.

Previous research has examined traditional mainstream American symbols of success such as educational and occupational attainment as universal indicators of life satisfaction (Peters, Wilson, & Peterson, 1986; Wilson & Peterson, 1988; Wilson, Peterson, & Wilson, 1993). However, Wilson, Henry, and Peterson (1993) found that an individual's own evaluations of their life circumstances is a more accurate predictor of life satisfaction as opposed to external evaluations of life experiences. Hence, this study will employ instruments that assess the adolescents' "perception" of family stress and family life satisfaction.

#### Demographic Factors

Demographic predictors of life satisfaction are the socioeconomic status of the family-of-origin, which appears to influence life satisfaction. Individuals from families with higher socioeconomic status are more likely to experience greater overall well-being than persons from more modest circumstances (Andrews & Withey, 1976; Douthitt,



MacDonald, & Mullins, 1992; Silverberg & Steinberg, 1987). Again, income and socioeconomic level has been found to be a predictor of life satisfaction (Harrison, Seratica, & McAdoo, 1984; Laosa, 1984; Peters et al., 1986; Peterson & Ellis, 1986; Wilson, Peterson et al., 1993).

Early adolescence is characterized by experiences associated with the many physical, social, and cognitive changes that occur with the onset of the adolescent years (Cohen, Burt, & Bjorck, 1987). Studies have consistently shown that an accumulation of recent negative events is positively related to psychological and physical health problems (Johnson, 1986). In general, an accumulation of positive life events and psychological problems are negatively related (Newcomb, Huba, & Bentler, 1981; Swearingen & Cohen, 1985).

### Age

The transition to adolescence involves a qualitative differentiation from practically or cognitively oriented coping styles, as well as quantitatively greater use of cognitively oriented coping. Hoffman, Levy-Schiff, Sohlberg, and Zarizki (1992) found that cognitively and practically oriented coping served as effective foils to the adverse effects of stress.

Kluwin et al. (1990) suggest that different coping strategy types could be differentiated by ethnicity, age, and gender. Patterson and McCubbin (1991) speculate that

older adolescents are driving cars, dating, and possibly working, which could contribute to their higher levels of stress compared to the younger adolescent. However, males and females are equally involved in these activities, yet the literature suggests that males and females will seek different coping methods to effectively deal with stress.

Papini, Farmer, Clark, Micka, and Barnett (1990) found that emotional self-disclosure to friends was greatest among older adolescents. Younger adolescents preferred to disclose information about their emotional state to parents.

Although Schumm, Bugaighis, Jurich, and Bollmon (1986) reported a negative relationship between adolescent age and family life satisfaction, Henry (1994) found that "adolescent satisfaction with family life increased as youth progressed from mid-adolescence through the high school years" (p. 16). Possibly, the current study will find an intervening variable to clarify these differences.

### Gender

Various studies have used differing variables to measure life satisfaction, yet the common element in each study has been gender differences in life satisfaction outcomes (Benson, Harris, & Rogers, 1992). However, some studies report greater life satisfaction by males than females (Andrews & Withey, 1976; Broman, 1991; Campbell, Converse, & Rogers, 1976; Wilcox, 1981). Previous studies found self-esteem in young adults to be positively related

to life satisfaction (Wilson, Henry et al., 1993) and to a greater extent for male than for female college students (Maton, 1990). Swearingen and Cohen (1985) found that negative life events were positively related to depression and anxiety and negatively related to self-esteem. Adolescents' perception of stressors can serve as a protective buffer to negative life events.

Brown and Orthner's (1990) study of relocation recency also reflected gender differences in life satisfaction. Neither relocation recency nor a higher moving rate were significantly associated with well-being among early adolescent males. Among females however, ages 12-14, life satisfaction was negatively affected by relocation recency and a higher moving rate. A higher moving rate also resulted in significantly higher levels of depression among females (Brown & Orthner, 1990). These differences may be due to females taking more time to develop an intrinsic basis for relationships, and males were more likely to have transferable credentials such as sports.

Warren-Sohlberg and Jason (1992) explored whether life stress and self-esteem varied according to the reason for student's school transfer. They found that students transferring because their old school closed were more competent academically and had a higher average socioeconomic status. Those transferring because of changing households had more stressful life events. These

findings suggest that "the change" is not the stressor: Rather, the "reason" for the change is a more appropriate consideration.

Significant differences were found in coping strategies among early adolescent males and females in relation to the level of role strain. Females experienced significantly greater family role strain and reported using social support significantly more often and ventilation significantly less often than males (Bird & Harris, 1990). However, females exhibited greater emotional self-disclosure to parents and peers than did males (Papini et al., 1990).

Substance use was the second lowest ranking coping pattern for both genders (Patterson & McCubbin, 1991). However, it appears, particularly for female adolescents, that coping may play a role mitigating against the use of substances through such means as competing patterns of solving family problems, seeking spiritual support, and engaging in demanding activity. Conversely, coping may play a role in facilitating use of substances through the complementary patterns of investing in close friends, ventilating feelings, and developing social support (Patterson & McCubbin, 1991).

Findings are relevant for adolescents' sex-role development and constructed individuality as mediated through relationships with both parents (Youniss & Ketterlinus, 1987).

The major difference is females' more frequent use of coping behaviors directed at developing social support. The coping pattern used most frequently by both genders was relaxing (e.g., listening to music, riding around in the car). Another important coping pattern for both males and females was developing self-reliance and optimism which involves direct action to solve problems and make decisions, as well as positive appraisal of the situation. Activities such as sports or schoolwork were rated with nearly the same frequency by both males and females. To seek professional support from a counselor or teacher was reported least frequently for both males and females. The ventilation of feelings by yelling, blaming, and swearing was rated with about equal frequency by males and females (Patterson & McCubbin, 1991).

Groer, Thomas, and Shoffner (1992) investigated developmental and gender influences on stress and coping in adolescents. Data were collected during the freshman year and again during the senior year of high school. Girls reported more life event stress at both testings than boys. Life event stress was greater at senior testing for both girls and boys, yet girls' scores increased more. Girls reported more life events associated with interpersonal and family relationships. Both girls and boys reported coping with stress mostly through active distraction techniques such as exercise. However, girls' use of active distraction

decreased over time, and passive distraction increased.

When presented with a hypothetical situation of a friend with AIDS, girls more than boys and distressed students more than nondistressed students were likely to endorse adaptive coping items. Another hypothetical situation of a suicidal peer showed more distress in boys than girls for the suicide problem. Subjects were more distressed and endorsed a wider variety of coping strategies in response to the AIDS scenario than to the suicide problem (Brown, Spirito, Reynolds, & Hemstreet, 1992).

Lee et al. (1992) suggest that although males and females used similar coping styles when confronted with difficulties, they differed in the frequency with which they might use a particular coping style when dealing with a particular problem. In a study of 16-18 year old adolescents, Frydenberg and Lewis (1991) found clear differences between the ways in which boys and girls coped. Girls employed more social support and generally were more likely than boys to focus on relationships. They also sought more strategies related to hoping for the best and wishful thinking.

Bird and Harris (1990) found females experienced significantly greater family role strain and reported using social support significantly more often and ventilation significantly less often. For both boys and girls, the most frequently endorsed coping strategies were "listen to music"

and "watch TV." For both boys and girls, frequent use of "ventilation" (e.g., complaining to friends, saying mean things) as a coping strategy was positively but weakly related to psychological symptomatology (Kurdek, 1987).

Coping studies suggest that females report more frequent use of a broader range of coping patterns than males. Girls scored higher on eight of the 12 coping patterns involving interpersonal relationships with friends, siblings, parents and other adults (Patterson & McCubbin, 1991). Females had significantly higher mean scores for developing social support, solving family problems, investing in close friends, and developing self-reliance. Males had a mean score significantly higher than females on being humorous (Patterson & McCubbin, 1991).

The differences in coping behaviors does not suggest that one gender is more effective than the other. Nor, does coping behaviors imply that one gender is more satisfied with family life than the other. However, because the females employ a more frequent use of a broader range of coping patterns than males, this may suggest that females will also report more satisfaction with family life.

#### Sources of Stress for Adolescents

Stress is defined in terms of forces, either within individuals (e.g., interpretation of event) or within the environment (events), that affect individuals. Thus, all

major life changes are stressful because of the social readjustment they require. Johnson (1986) found that the greater the number of events experienced within a given period of time, the greater the stress experienced. Due to the number of developmental and family life cycle changes, adolescence can be a particularly vulnerable period for life change and stress.

Stress may result from experiencing a variety of potentially pleasant and unpleasant events. Much research focuses on "life events," ignoring the individual's interpretation of these events as either desirable or undesirable.

Adolescents want and need to take charge of their own lives, to make their own decisions, to choose their own friends, to plan their own activities, to think their own thoughts, and to dream their own dreams. However, because of the responsibility parents have regarding their adolescents, growth toward independence is often mistaken for rebellion (Steinberg & Levine, 1990).

Schellenbach and Guerney (1987) suggest factors that characterize families at-risk for high-level stress: (a) family communication patterns involving excessive authority or permissiveness enforced by abusive punishment; (b) a high level of recent family conflict; (c) adolescents who present behavioral challenges to parents; (d) adolescents who are themselves experiencing stressful events, especially alcohol



or drug abuse; and (e) parents who respond with more discipline and less support to high-risk adolescents. This substantiates Baer, Garnezy, McLaughlin, and Pokorny's (1987) findings that subjects reported more alcohol use in relation to more life events, more daily hassles, and more conflict in the family.

Any change that disrupts the familiar expectations within a family marks the onset of a crisis. Sometimes the event that precipitates a crisis is dramatic, unexpected, and unfortunate. However, positive changes can also precipitate crises. For example, graduation or an outstanding accomplishment can bring about a positive crisis.

However, prior research (Johnson, 1986) suggests that negative stress is more likely to have an impact on respondents than positive stress. Because, both negative and positive stress effects change in one's life, the positive changes are encouraged while the negative changes are usually unwanted. Frequency of life events and their average intensity were distinct measures and of equal importance when assessing stress among adolescents (Mullis, Youngs, Mullis, & Rathge, 1993).

Koch-Hattem, Hattem, and Plummer (1987) found that a pileup of stressors, role inflexibility, rules prohibiting emotional expression, family income, and perceived severity of the stressor influenced variance in negative family

mental-health outcomes. However, when adolescents hold models of relationships with parents that are characterized by anger or insecurity and face increased pressures to seek autonomy, a high risk of problem behavior ensues (Allen, Aber, & Leadbeater, 1990).

### Adolescent Coping

Adolescent coping behavior is an important component of how stress relates to adolescent well-being. This stress and coping concept suggests that researchers must consider coping behaviors which may exacerbate or reduce the impact of stress. "Coping as both a buffer against stress and a contributor to stress is important to adolescents because many of the coping behaviors learned during this stage of the life cycle form the basis for one's adult coping style" (Patterson & McCubbin, 1987).

The critical task for the adolescent is the struggle with staying connected to and dependent on their families while also trying to exercise their growing need for independence. This pull between "being connected to" and "being separate from" one's family underlies adolescent coping behavior (Patterson & McCubbin, 1991, p. 235).

The Double ABC-X Model defines coping as a specific cognitive and/or behavioral response of the adolescent. Resources are what one has, while coping is what one does.

Coping often involves utilizing resources in order to meet demands. Coping is a bridging concept in the Double ABC-X Model which involves the interaction of resources and definitions or appraisals in response to the pile-up of demands (Patterson & McCubbin, 1987).

Coping is defined as:

(a) the family's strategies, patterns, and behaviors designed to maintain and/or strengthen the organization and stability of the family unit; (b) the family's ability to maintain emotional stability of the family members; and (c) the family's skill in initiating efforts to resolve the family hardships created by the stressor/transition (McCubbin & McCubbin, 1987, p. 12).

A family's outlook can vary. For example, "a family can see life changes and transitions as challenges to be met, or they can interpret a stressor as uncontrollable and a prelude to the family's demise" (Patterson & McCubbin, 1987, p. 168).

Henry (1994) found that adolescents who perceived their parents to communicate support reported greater satisfaction with family life. Additionally, adolescents who perceived their families to have strong emotional connections reported greater satisfaction with family life (Burke, 1989; Olson et al., 1983).

Patterson and McCubbin (1991) suggest that adolescent coping behavior can be validly assessed from the perspective

that adolescent coping is often directed at multiple demands or pile-up and coping need not be considered only stressor-specific. That is, for adolescents, coping could be used as a means of establishing themselves as adolescence. For example, gender differences in coping suggest that girls report more frequent use of a broader range of coping patterns than males.

The influence of adolescent-family stressors, along with parental and adolescent coping, are critical factors in explaining differences between illicit drug users and non-substance users. The findings point to the importance of the total family system as a viable target for early intervention and prevention-oriented efforts (McCubbin, Needle, Lazar, and Reineck, 1985). Usually substance use has been considered an emotion-focused coping behavior for reducing internal tension associated with too much stress. However, using substances may be one way the adolescent experiments with peer group alignment and with differentiation from family. Rather than being a way to reduce tension, substance use or the adolescent may be a way to "fit" into the peer community. This perspective is in keeping with the picture of the adolescent struggling between two levels of fit; with the family and with the community through the peer group (Patterson & McCubbin, 1987).

The association between being with friends and using

substances suggests the important socializing role peers may have in an adolescent's learning new coping responses. In a study after a hurricane, subjects did not list stressors or coping methods directly related to the hurricane. Their primary stressors were related to relationships with boyfriends/girlfriends and perceived threats to the self (Hardin, Carbaugh, Weinrich, & Pesut, 1992). However, some adolescents are influenced by peers toward detrimental coping behaviors.

A-COPE behaviors and patterns are directed primarily at managing tension. Four patterns focus primarily on avoidance: ventilating feelings, seeking diversions, relaxing, and avoiding problems. Coping behaviors associated with ventilating feelings and avoiding problems are usually evaluated as undesirable. However, most of the coping patterns address more than one function. Five of the coping patterns (i.e., developing social support, solving family problems, seeking spiritual support, investing in close friendships, and seeking professional support) involve talking to other people as a way to discover solutions to problems and increase social support, which is considered a direct action. However, most of these same behaviors could possibly help reduce tension and may directly lead to altered meanings of the stress.

Similarly, the coping pattern of engaging in demanding activity is primarily directed at increasing resources

available to the adolescent, but may also help manage tension. The coping patterns which focus on appraisal or altering meaning, that is one's perception of the situation, include being humorous and developing self-reliance. However, these coping behaviors also include direct action behaviors to increase one's resources.

Overall, it would appear that coping behaviors do not classify neatly into patterns on the basis of discrete function and that any given coping behavior may, in fact, serve more than one function. The coping process does not appear to be unidimensional, but rather multi-dimensional in that any given coping behavior may be focused on a pile-up of demands and it may simultaneously serve more than one function (e.g., solve problems and manage emotions (Patterson & McCubbin, 1991, p. 247)).

### Seeking Diversions

Basic conditions that make an individual susceptible to self-destructive behaviors can, alternatively, be enhanced to help prevent such behaviors. Many of these characteristics relate to the youth's environment, such as poverty, education, and the family. Others are internal to the person: personality traits, needs, values, and beliefs. These social and psychological variables interact to form a substrate that can make an individual susceptible to drug involvement or can inoculate

that youth against drug use. The pressures to conform to drug-using norms are too strong to overcome if the peer clusters retain their influence (Oetting & Beauvais, 1986).

Exposure to peer use and misuse of alcohol was a significant predictor of adolescent alcohol misuse (Dielman, Shope, Butchart, & Campanelli, 1989). Friedman, Tomko, and Utada (1991) suggest that family communication was an effective predictor of treatment outcome for drug abusers.

Additionally, adolescent smoking appears to reflect social pressures (Eiser, Morgan, & Gammage, 1988). Adolescent smoking is a behavior that is fostered by environments in which peers and family members smoke and by the advertising of tobacco products (Harken, 1987).

Kissman and Shapiro (1990) found that peer support was positively related to well-being. Community support was more likely to occur for subjects who also received help from their family, while popularity may have a function in stress and support. Frankel's (1990) research suggests that individual differences in perceived support and stress were meaningfully related to peer popularity. Popular and neglected subjects reported less stress than controversial, rejected, or average subjects.

Brown, Lohr, and McClenahan (1986) revealed that peers were seen as encouraging misconduct less than other types of behavior. Female subjects reported stronger peer pressure than males toward conformity and social

involvement. Associations between perceived pressures and personal attitudes or behavior were significant but modest and were sometimes mediated by gender or grade level.

Behavioral prevention programs use instruction, role playing, feedback, and reinforcement to increase resistance to social pressures. Bukoski (1985) found behavioral training in relevant social skills holds the most promise for preventing adolescent school-based substance abuse. The basic premise of early intervention programs includes the belief that the family and the adolescents' close friendships and socially supportive networks can be an effective means of preventing adolescent adoption or maintenance of health risk behaviors.

Adolescent-family stressors and strains appear to be important interpersonal factors associated with adolescents' health risk behaviors, but not necessarily causes of such behaviors. The adolescents' efforts to work out difficult issues with family members and to reduce tension in the same environment by talking to one's parents, doing things with the family, talking to a sibling about feelings, and going along with parents' requests appeared to compete with or work against the adolescents' adoption and maintenance of health risk behaviors (McCubbin, Needle, & Wilson, 1985). Adolescents' efforts to express frustrations and tensions through getting angry and yelling, blaming others, saying mean things, and complaining to family



members was associated with their greater use of cigarettes and alcohol and with boys' use of marijuana. However, the ways in which adolescents respond to stress seem to be differentiated by age and gender (McCubbin, Needle, & Wilson, 1985). These destructive behaviors appear to be directed against the family as a means of making a statement. Thus, it would follow that family life satisfaction would be low for these adolescents.

#### Social Supports

One coping approach used by adolescents is seeking involvement in interpersonal relationships with friends, siblings, parents, and other adults. Shulman, Seiffge-Krenke, and Samet (1987) revealed a sense of lack of family support or an overcontrolling family climate was related to a higher level of dysfunctional coping. Adolescent perception of family climate was found to be related to the nature of the task or situation the adolescent encounters.

The adolescents' natural tendency is to turn to peers as part of their coping repertoire, particularly in the face of adolescent-family stressors and strains (McCubbin, Needle, Lazar et al., 1985). McCubbin, Needle, Lazar et al. (1985) found that the family and the adolescents' close friendships and socially supportive networks can be an effective means of prevention, adolescent adoption, or maintenance of health risk behaviors. Tolin (1988) suggests that a family's ability to support each other, especially

during transitions, and stress, associated with adolescence relates to a lower level of antisocial behavior.

Additionally, adolescents provide to their siblings the inherent human need of social support (Goetting, 1986). Lamb (1982) observed that siblings commonly become primary sources of emotional support that typically persist through adolescence and young adulthood.

Changing gender roles may be expanding the coping options more for females than for males (Patterson & McCubbin, 1987). Patterson and McCubbin (1987) found that boys being socialized to be more independent of the family was not reflected in higher scores for self-reliance. However, girls actually scored higher on the coping patterns directed at being self-reliant.

Previous studies with Vietnam soldiers' wives (McCubbin & Dahl, 1975) and career women (Pietromonaco, Manis, & Frohardt-Lane, 1986) found that some coping patterns emerge as more beneficial to stress management and produce greater life satisfaction. Therefore, this study proposes that the same patterns will be true for adolescents.

### Religiosity

Strong religious faith is related to high family cohesiveness (Bahr & Chadwick, 1985) and helps adolescents meet crises, partly because it provides a positive way of looking at suffering (Olson et al., 1983; McCubbin & McCubbin, 1989). Stinnett and Defrain (1985) stated that

the spiritual dimension of ourselves is one of the important elements of success and strength in strong families.

Religiosity can be manifested in various ways: faith in God, faith in humanity, ethical behavior, unity with all living things, concern for others, or religion. Spiritual wellness is illustrated by strong families as a unifying force, a caring center within each person that promotes sharing, love, and compassion for others. It is a force that helps a person transcend self and become part of something larger (Stinnett & DeFrain, 1985). According to Stinnett and DeFrain (1985), spirituality provides individuals with feelings that they are a part of something bigger than self (a part of an eternal spirit or of humanity) that gives them perspective, hope, optimism, and confidence.

The importance of peer influence and commitment to conventional structures of family and religion in relation to adolescent problem behaviors have empirical support (Barrett, Simpson, & Lehman, 1988). Drug treatment problem behaviors were positively related to peer drug use and negatively related to the amount of family support and a background of religious involvement. One of the benefits of membership in a religious group is the fellowship and support from people who share common beliefs and provide a support system (Stinnett & DeFrain, 1985).

Balk (1991) suggests that the increased importance of

religion in the lives of many of the subjects could be a development facilitated by mourning.

Schumm, McCollum, Bugaighis, Jurich, and Bollman (1986) found adolescent family life satisfaction to be negatively correlated with religiosity. Patterson and McCubbin (1987) posit that males may seek spiritual support more often than females, yet seeking spiritual support is ranked fifth for males and sixth for females, suggesting that seeking spiritual support is used moderately to cope or adapt to stress.

Schumm, Hatch, Hevelone, and Schumm (1991) found that when they controlled for conservatism, the correlations between intrinsic religiosity and the dependent variables remained strong. These results imply that the critical factor is intrinsic religiosity rather than conservatism, even though they are related to each other.

#### Self-Reliance

Patterson and McCubbin (1991) referred to self-reliance as any direct effort by the adolescent to be more organized and in charge of their situation. Gecas (1989) suggested that self-efficacy, an aspect of self-reliance, refers to one's assessments of their own effectiveness, competence, and causal agency.

Social scientists have often assumed that parental influence is sharply curtailed at adolescence because of the rising counterinfluence of peer groups, over which parents

have little control (Patterson & McCubbin, 1991). However, Brown, Mounts, Lamborn, and Steinberg's (1993) study indicated that parenting practices were significantly associated with the adolescents' self-reliance, which in turn were significantly related to membership in common adolescent crowds, such as jocks or druggies. Covey and Feltz (1991) found that physically active subjects reported self-image and coping characteristics that were significantly more positive than those reported by physically inactive subjects. Such findings support Steinberg, Fegley, and Dornbusch's (1993) findings that an adolescents' job of more than 20 hours a week furthers autonomy from parents, and thus increases self-reliance. Barrett et al. (1988) collaborates these findings in their study which showed that problem behaviors were negatively related to the amount of family support, supporting the importance of commitment to conventional family structures.

Self-efficacy and confidence can become concrete in the treatment of chemical dependency. St. Mary and Russo (1990-91) suggest that when substance abuse serves to temporarily ward off undue stress and tension, it becomes difficult for adolescents to develop the necessary coping skills that in turn increase their confidence when confronting stressful situations. Also, self-efficacy judgments significantly moderated the predictive effects of social influence on smoking tendencies (Stacy, Sussman, Dent, & Burton, 1992).

Additionally, deprived or unstable family environments may be causally linked with a general low self-efficacy among runaways. Kaliski, Robinson, Lawrance, and Levy (1990) found that a perceived self-efficacy may be a significant cognitive determinant as to whether or not adolescent runaways engage in high-risk acquired immune deficiency syndrome (AIDS) behaviors. In a study that examined the coping strategies of lonely, gifted, rural adolescents, Woodward and Kaylan-Masih (1990) found extended social support and perception to be key elements. Cappelli, McGrath, Heick, and MacDonald (1989) noted that the adolescent's perception of his or her physical health and the reaction of other family members to the illness were important sources of stress. Weinert and Long (1987) found that self-reliance emerged as a significant coping strategy for dealing with illness.

Shulman et al. (1987) revealed a sense of lack of family support or an overcontrolling family climate was related to a higher level of dysfunctional coping. Adolescent perception of the family climate was found to be related to the nature of the task or situation the adolescent encounters.

The feelings or definition of self is an aspect of an internal map by which individuals orient their lives. Scholarship relative to self-reliance notes the consequences the family has on the adolescents' perception of themselves.

Overall, it would appear that the higher one's self-reliance, which is learned from their families and environment, the higher the family life satisfaction.

#### Adolescent Family Life Satisfaction

Adolescent family life satisfaction, or adaptation, "reflects the extent to which adolescents positively evaluate their families as environments that promote the ability of the youth to progress through developmental changes in the context of a supportive family climate" (Henry, 1994, p. 5).

Schumm, Bugaighis, Bollmon, and Jurich (1986) found that indicators of quality of life for adolescents were overall satisfaction with family life and satisfaction in relationships with parents. Henry (1994) posits that "one means of understanding family adaptation during the adolescent phase of the family life cycle is to examine the adaptation of adolescents to their families" (p. 3).

Additional studies (Burke, 1989; Olson et al., 1983) suggest that adolescents had greater satisfaction with their families when the families were able to respond in an adaptive manner to the changes associated with issues in daily life. To iterate, adolescents are more satisfied with their family life when their families are able to teach them how to cope or adapt to stress.

Olson et al. (1983) attempted to identify family

factors which appear to adequately handle stressors and strains in families with adolescent members. Cavan and Ranck (cited in McCubbin & McCubbin, 1991) and Koos (cited in McCubbin & McCubbin, 1991) found that family satisfaction is obtained when the family successfully meets the physical and emotional "needs" of its members and goals toward which the family is moving collectively. Family support was related to greater satisfaction with life (Unger & Wandersman, 1988). Ortman (1988) found a high correlation between feelings of control and life satisfaction, which suggests a faith in the ability to master life problems. Life satisfaction seems to be advantageous for the families, as well as individuals.

In general, positive assessments of life experiences may be expected to be associated with overall life satisfaction (Wilson, Henry, & Peterson, 1993). Lee (1983) found that when adolescent mothers believed that they were able to master life circumstances they fared much better, despite having many life stressors. Gutek, Allen, Tyler, Lau, and Majchrzak (1983) suggest that life satisfaction is associated with both desires and expectations.

This study will employ the LISREL model because of LISREL's ability to measure causal relationships. LISREL provides improved reliability and validity of empirical measurements. LISREL combines the confirmatory factor analytic model and the structural equation model, thus



providing construct validity for the Adolescent Family Life Satisfaction scale. The research model and theory is an integral part of a LISREL study, therefore, the data and the Double ABC-X Model should be a perfect match for LISREL.

## APPENDIX B

## METHODS

Procedure and Sample

Subjects for this study were ninth to twelfth grade students at a public high school in a metropolitan community in the southwestern United States. The principal was the initial contact for the survey. She determined the male and female physical education classes, and one teacher's math classes to be used for the study. Upon completion, all subjects received a pair of sunglasses.

Three hundred thirty eight self-report questionnaires were distributed. From this number, 312 (92%) students participated in the study. The mean age of the sample was 15.9, ranging from 14 to 20. Sixty-six percent were 15 and 16 years old. Gender was evenly divided with 160 (51%) males and 152 (49%) females. Racial distribution follows: 188 (60%) Caucasian, 72 (23%) African American, 25 (8%) Native American, 11 (4%) Hispanic, 9 (3%) Asian, and 7 (2%) other.

Both student and parent/guardian were asked to sign a consent form that provided details about the study and how the responses would be used. See Appendix E.

Table 4 (p. 99) represents the demographic information of the subjects. Demographics include: age, grade in

school, gender, race, religious preference, parents' marital status, parents' educational level, mother's occupation, father's occupation, number of siblings, birth order, and who lives with the subject now (i.e., relatives, brothers/sisters, or step-kin).

---

Insert Table 5 about here

---

Bentler and Chou (1987) suggest that, as a rule of thumb, a ratio of 10:1 between the sample size and the number of free parameters-to-be-estimated may be appropriate for the solution to be trustworthy. Bearden, Sharma, and Teel (1982) concluded that "a researcher who wants to reduce the risk of drawing erroneous conclusions should not use samples of less than 200" (p. 429). This study meets these criteria with the number of parameters estimated as shown in the "parameter specifications" for a given model, i.e., the number shown on the page after the correlation or covariance matrix output.

#### Measurement

All instruments are self-report questionnaire which students completed in approximately 30 minutes. The self-report questionnaire used in this study includes previously established instruments and a standard fact sheet to assess

the demographic variables.

Table 5 (p. 102) depicts a chart of the following instruments used and information about each scale. Reliability information has been given from both the original author and reliability data from this study.

---

Insert Table 5 about here

---

#### Measure of Adolescent Stress

Adolescent Life Events Checklist (ALEC) is a 42-item self-report instrument designed to record normative and non-normative life events and changes an adolescent perceives his or her family has experienced during the past 12 months (Fournier, 1981). ALEC contains 42 potentially stressful events that an adolescent may have experienced within the past 12 months or is currently experiencing. The events may be positive or negative. ALEC assesses the perceived stress an adolescent experiences as a result of the pile-up of events and changes occurring within his or her family.

ALEC has four coded response options. "No, life event did not occur" (0). "Yes, life event occurred but was not stressful" (1). "Yes, life event occurred and was stressful" (2). "Yes, life event occurred and was highly stressful" (3). Adding the raw scores of 0, 1, 2, or 3 would erroneously assume the option of 1 as being stressful

when the response to the question was actually, yes the event occurred but was not stressful. In order to measure the perceived stress a raw score response of 0 or 1 was coded statistically as zero (0), that is, not stressful. A raw score response of 2 or 3 was coded statistically as one (1), a stressful event. Thus, the total sum of the recoded items represents the total stress score. Since the purpose of this study is to access the perceived stress for the adolescent, the responses were divided into two categories: stressful or not stressful. The overall life events were divided into four sub-categories (sexual, family, personal and school) and subscale scores were obtained for each category of events.

Not all adolescents perceive the same life events as stressful, therefore, adolescent stressful life events were measured according to the subjects' perceptions. The present study measured the accumulation of the subject's perceived level of stress as an exogenous latent variable.

The internal consistency reliability coefficient (Cronbach's alpha) originally was .88 (McGaha & Fournier, 1987), and .88 for the present study. The internal consistency established for the subscales were: .71 for the sexual subscale; .75 for the family subscale; .75 for the personal subscale; and .61 for the school scale.

### Measure of Adolescent Family Life Satisfaction

Adolescent Family Life Satisfaction (AFLS) assesses the satisfaction of adolescents with aspects of their family life. The instrument measures the extent to which adolescents are satisfied with the ability of their families to provide a sense of connectedness while encouraging the development of autonomy in relationships with parents and siblings and in parents' relationships with each other (Henry, Ostrander, & Lovelace, 1992).

AFLS, an endogenous latent variable in this study, is comprised of 13 items scored on a 5 point Likert scale with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The subjects respond to each statement based upon their feelings about the family members living in their homes, including stepfamily members. Total scores are the sum of responses to each of the 13 items. Henry et al., (1992) reported an internal consistency reliability coefficient (Cronbach's alpha) of .90. The over-all Index, the Parental Subscale, and the Sibling Subscale were significantly and positively correlated ( $p < .01$ ) with the Family Satisfaction Scale (Henry et al., 1992): .72 for the over-all Index, .78 for the Parental Subscale, and .43 for the Sibling Subscale (Henry et al., 1992). Internal consistency reliability coefficient (Cronbach's alpha) for this study was .86.

## Measures of Adolescent Coping

### Adolescent Coping Orientation for Problem Experiences

(A-COPE) is a coping inventory designed to identify the behaviors adolescents find helpful in managing problems or difficult situations (Patterson & McCubbin, 1991).

The A-COPE is a 54-item Likert scale that measures the frequency with which the adolescent utilizes various coping behaviors. The scale uses the following response categories: (1) never, (2) hardly ever, (3) sometimes, (4) often, and (5) most of the time. Sub-scale scores were computed by summing responses for each category. The categories are detrimental coping (19 items), social support (16 items), and self-reliance (6 items). Maddi (1981) suggests that the detrimental coping behaviors of ventilating feelings and avoiding problems are normatively evaluated as undesirable, but social support and self reliance coping behaviors as in the realm of transformational or evolutionary.

A-COPE uses two levels of abstraction: coping behaviors and coping patterns. The 12 coping patterns are: ventilating feelings; seeking diversions; developing self-reliance and optimism; developing social support; solving family problems; avoiding problems; seeking spiritual support; investing in close friends; seeking professional support; engaging in demanding activity; being humorous; and relaxing. McCubbin, Needle, and Wilson (1985) found two

classes of coping patterns: complementary coping patterns and competing coping patterns. Ventilating feelings, investing in close friends, and developing social support appear to complement substance abuse; whereas, coping directed at solving family problems, seeking spiritual support, and engaging in demanding activity compete against substance abuse (Patterson & McCubbin, 1991). A-COPE is scored by summing the respondents' score within each coping behavior, (e.g., ventilating feelings, avoiding, seeking diversions, relaxing, social support, solving family problems, friends, and professional help).

Reliability and validity has been reported on subscale levels. The Cronbach's alphas for detrimental coping included seeking diversions, which was .75; avoiding problems = .71; relaxing = .60; and ventilating feelings = .75. Developing social supports was .75; solving family problems = .71; investing in close friends = .76; and seeking spiritual support = .72. Self-reliance had a Cronbach's alpha of .69. All of which average a Cronbach's alpha of .74 (Patterson & McCubbin, 1991). Compared to the present study: ventilating feelings = .72; avoiding problems = .62; social support = .70; solving problems = .72; developing close friends = .64; and seeking professional help = .43.



### Measure of Religiosity

The scales for intrinsic and extrinsic religiosity are shortened versions of I-E (intrinsic and extrinsic) scales initially developed by Gorsuch and Venable (1983), and extended one item by Schumm et al. (1991) for a total of 11 items. Examples in intrinsic items are "I have often had a strong sense of God's presence" and "My religion is important to me because it answers many questions about the meaning of life." Items 5, 7, 9, 11, and 12 are from Gorsuch and Venable's "age universal" I-E scale and represent intrinsic religiosity while items 2, 4, 14, 17, and 20 represent extrinsic religiosity. The subjects were asked, "to what extent do you agree or disagree with the following statements about society, the church/temple, and your own beliefs?" The Likert scale ranged from "Strongly Disagree", "Disagree", "Uncertain", "Agree" or "Strongly Agree". Scores were established by the total sum of intrinsic and extrinsic items.

Schumm et al. (1991) added an item to assess a specifically Christian intrinsic religiosity: "My relationship with Christ is a vitally important part of my life." All other items generalize to any faith that accepts God or the Bible. For this study the items have been expanded to include Jewish or Islamic faiths as well. Items 1, 3, 7, and 9 were changed to read "church/temple" instead of "church". Schumm (1994) reported Cronbach's alpha

coefficient as .80. The Intrinsic data from this study resulted in an alpha of .79.

### LISREL Modeling

The multivariate model was analyzed with the use of the Linear Structural Relations (LISREL 7.16) program (Joreskog & Sorbom, 1984). LISREL is a versatile and powerful method that combines features of factor analysis and multiple regression for studying both the measurement and the structural properties of theoretical models. LISREL is especially useful in family research as it allows the estimation of causal relationships among latent (unobserved) variables with adjustment for measurement error and correlated residuals (Lavee, 1988).

LISREL is based on mathematical and statistical approaches which employ matrix algebra and the maximum-likelihood function. LISREL provides improved reliability and validity of empirical measurements and a strategy for studying structural relationships among variables that better represent theoretical constructs (Lavee, 1988). LISREL combines the confirmatory (the extent to which a study is a replication) factor analytic model and the structural equation model. Factor analytic models are concerned with how well theoretical constructs are measured. However, structural equation models are concerned with the structural (causal) relationships among constructs.

One of the unique capabilities of LISREL is that LISREL simultaneously provides "full information estimation" for all parameters in the model and produces information about the overall Goodness-of-Fit Index (GFI). Many family researchers have used the simultaneous estimation approach (Lavee, 1988).

LISREL provides a number of goodness-of-fit tests to estimate how well the data fits the model. Therefore, the research model and theory are integral parts of a LISREL study. Because all the relevant constructs are being considered simultaneously, too many variables or too complex a model may render a large model untestable in LISREL. Additionally, the complexity of the model determines the appropriate size of the sample. However, sample size requirements will vary from study to study based on the number of free parameters-to-be-estimated and the risk of drawing erroneous conclusions.

Each construct is classified as endogenous or exogenous. If a construct is directly caused or influenced by any of the construct, it is classified as endogenous. If a construct is "not caused by any other variable in the model" (Cohen & Cohen, 1983, p. 375), and fluctuations in the values of this construct are not to be explained by other variables in this model, then it is an exogenous variable. The number of endogenous and exogenous construct dictate the sizes of the matrices and vectors which are

determined by the substantive conceptual model (Hayduk, 1987).

#### Model Specification

Specification of the latent variables, should ensure that a theory's constructs are in fact embedded in the model (Bentler, 1980). The latent variables are abstractions that underlie measured variables, and the specification of the measurement model is guided by theoretical reasoning.

LISREL's capability to define theoretical constructs operationally as latent (unobserved) variables and the ability to estimate all of the model's parameters simultaneously, is one of the major strengths of LISREL. Lavee (1988) suggests the use of multiple indicators to measure a construct because multiple indicators are more likely to capture a complex theoretical construct. Bentler and Chou (1987) recommend three or more indicators to avoid the risk of underidentified latent variables. Additionally, the error term of measured variables can be estimated only when multiple indicators are specified, and only then can a latent variable be treated as a "true," errorless variable.

The use of a single measure is justified when the measure indicates a relatively simple, measurable variable, such as age or gender. Lavee (1988) suggests that an errorless latent variable be made isomorphic (i.e. a one to one correspondence) with the indicator by fixing the loading

to 1 and the measured variable's error to 0. Additionally, the external criterion of reliability (such as Cronbach's alpha) can be used to constrain the relation between the measured variable and the latent variable to the value of the estimated "true" variance (i.e., its known reliability).

The initial model depicted in Figure 1 (p. 33), was specified to enable testing the multivariate theoretical model and its set of hypotheses. In this model, six variables were operationalized as latent variables, that is, as common factors of a prior specified indicator (measured) variables: (a) Stressful life events which included sexual, family, personal, and school; (b) Detrimental Coping which included seek diversions, avoidance, relaxing, and ventilating feelings; (c) Social Support which included develop social support, solve family problems, seek spiritual support, invest in close friendships, and seek professional support; (d) Religiosity which included intrinsic and extrinsic dimensions; (e) Self-Reliance which included a single factor of developing self-reliance and optimism; and (f) Adolescent Family Life Satisfaction which included both satisfaction with the parental and sibling subsystem.

---

Insert Figure 1 about here

---

Self-reliance was assumed to be a less than totally reliable measure. Because the program cannot compute the residual of a single indicator (as it does when two or more variables are specified to load on an underlying construct), and because a full reliability could not be assumed, the loading of the observed variable and its measurement error were estimated based on the Cronbach's alpha reliability using the procedure illustrated by Lavee et al. (1987). The correlation matrix, means, and standard deviations for the original model are depicted on Table 6, (p. 103).

---

Insert Table 6 about here

---

#### Testing and Revising the Model

To examine the measures of overall model fit and testability, and to assess whether modifications were needed, the following guidelines were used: If the model is not identified, LISREL does not provide certain statistics (namely, standard errors and t-values). Other indicators of major problems in the model or the data are a covariance matrix, that is not positive definite, negative variances, correlations that are larger than one in magnitude, or extreme standard errors.

If the model is testable but does not fit the data, the modification indices provide a particularly useful means

for assessing what changes in the model's specification would improve its fit to data.

Specifically, a modification index larger than 5.0, in either the measurement or the structural model, indicates that the model's fit to the data will improve significantly if the respective path is allowed (that is, if the constraint of fixed parameter is relaxed) (Lavee, 1988, p. 942).

In assessing the model's fit, the Goodness-of-Fit Index (GFI) was used. GFI may range from 0 to 1.0. Hoelter and Harper (1987) have suggested that a GFI greater than .90 indicates a good fit. Yet, there is no single acceptable criterion for judging the overall goodness of a model; therefore, multiple measures will be examined.

### Results

The original "full model" included age and gender. Age was dropped because age was not significantly related to any coping strategy or AFLS. The age distribution of the sample was a potential explanation for these findings. The age distribution of the sample was heavily restricted and skewed to the ninth and tenth grades and did not allow for a realistic test of the hypothesis involving age with coping strategies and adolescent family life satisfaction. For this reason, a more even distribution of age may have proven beneficial. The hypotheses (11, 14, & 15) involving age

were not included in this model because of the low correlations.

Gender was significantly related to social support and marginally to detrimental coping, but not significantly related to adolescent family life satisfaction. Gender was left out of the model because of the unacceptably high correlation with one of the indicators of stressful life events (LESEX), (i.e., excessive correlation between error terms). In other words, an acceptable model could not be achieved involving gender. Hypotheses involving gender were 10, 12, 13, & 16.

Evaluation of the structural parameters suggested that the model could be improved by discarding self-reliance, hypothesis number 9. Self-reliance had a non-significant relationship with AFLS.

Seeking diversions and relaxing within detrimental coping were not highly related to avoidance or ventilating feelings, and not included in the revised model. Seeking diversions and relaxing reduced the GFI to unacceptable levels.

#### Examination of the Model Parameter Estimates

The "reduced model" of Adolescent Family Life Satisfaction is depicted in Figure 2 (p. 34). Adolescent Family Life Satisfaction follows an accumulation of adolescent stressful life events and adolescent coping mechanisms. Adolescent stressful life events include



sexual, family, personal, and school interactions. Coping mechanisms include detrimental coping (i.e., the use of avoidance or ventilating feelings); social supports (i.e., developing social supports, solving family problems, investing in close friends, and seeking professional support); and the use of an intrinsic religion. Adolescent family life satisfaction was divided into satisfaction with parents and siblings. The descriptive statistics and correlation matrix for these indicator variables is shown in Table 1 (p. 30).

---

Insert Figure 2 about here

---

---

Insert Table 1 about here

---

Analysis of the model, as specified in Figure 2 (p. 34), indicated that some constructs may not fit the data sufficiently well. However, even though the chi-square measure of goodness-of-fit, with the 59 degrees of freedom, was 143.81 ( $p < .01$ ), indicating a potential discrepancy between the data (variance-covariance matrix) and the relations specified in the model, the Goodness-of-Fit Index (GFI) was 0.918, indicating an overall satisfactory fit of the data with the specified model.

The parameter estimates of the "reduced model" are presented in Table 2 and Table 3. Table 2 (p. 31), depicts the maximum-likelihood estimates of the revised measurement model. The results of the structural model estimates are shown in Table 3 (p. 32).

---

Insert Table 2 about here

---

The four factors of stress (ALEC) or Lambda X constitute an identifiable construct. The t-values of the indicators of adolescent stressful life events for this study are: personal = 9.65, family = 9.33, and school = 8.31. T-values greater than or equal to 2.0 are considered significant factor loadings.

---

Insert Table 3 about here

---

Gamma 1 (.63) suggests that as stress increased subjects more generally chose detrimental coping behaviors, compared to Gamma 2 (.22) of social support. Gamma 3 (-.13) suggests that as stress increased subjects were less likely to be religious, however -.13 is not statistically significant. Gamma 4 (-.12) suggests there was no significant direct effect (controlling for coping strategy)

between stress and AFLS.

The total effect of stress on AFLS was  $-.40$ , and the  $t$ -value was  $-3.65$ . The value of  $-.40$  ( $-.28$  indirect and  $-.12$  direct) suggests that stress and family satisfaction have a significant, but indirect relationship based on coping strategy. As perceived stress increases, family satisfaction decreases. However, the choice of coping strategy can account for and buffer the impact of stress on adolescent family life satisfaction.

The indirect effect is the combined effect of Gamma 1, Gamma 2, and Gamma 3 multiplied by Beta 1, Beta 2, and Beta 3. The indirect effect of stress on AFLS was  $-.28$ , this was primarily detrimental coping and secondarily social support.

As shown in Table 2, Beta 1 (detrimental coping) was  $-.60$  indicating a negative relationship with AFLS. The more that detrimental coping strategy was used, the less family satisfaction the adolescent reported. Beta 2 (social support) was  $.54$  indicating a positive relationship with AFLS. The more social support strategy is used the greater adolescents perceive family satisfaction. Beta 3 (religion) was  $.12$  which is not significant.

#### Summary of the Tests of the Hypotheses

If an estimated value (e.g., a regression coefficient) is larger than would be expected by chance, the null hypothesis is rejected and the research hypothesis is said

to be "confirmed" (Lavee, 1988).

Hypothesis 1: Gamma 1 coefficient was .63 which is statistically significant, with a t-value of 5.51, thus confirming a positive relationship between the level of stressful life events perceived by adolescents and detrimental coping.

Hypothesis 2: Gamma 3 coefficient was -.13 with a t-value of -1.20, thus confirming a negative relationship between the level of stressful life events perceived by adolescent and religiosity, although religiosity was not statistically significant.

Hypothesis 3: Gamma 1 coefficient was .63 with a t-value of 5.51, thus confirming a positive relationship between the level of stressful life events perceived by adolescents and their choice of detrimental coping. That is, as perceived stress increases the more detrimental coping will be the strategy of choice.

Hypotheses 4 and 9: Self-reliance was not included in the final model as self-reliance was non-significant.

Hypothesis 5: Gamma 4 coefficient was -.12 with a t-value of -.62, thus confirming a negative relationship between the level of stressful life events and adolescent family life satisfaction, though not statistically significant.

Hypothesis 6: Beta 1 coefficient was -.60 with a t-value of -2.30, thus confirming a negative relationship between

detrimental coping skills and adolescent family life satisfaction.

Hypothesis 7: Beta 3 coefficient was .12 with a t-value of 1.67, thus confirming the positive relationship between religiosity and adolescent family life satisfaction. Religiosity had a positive direction, but not the magnitude to make it statistically meaningful. The religiosity magnitude may be explained by the fact that adolescents have not had life experiences to have acquired intrinsic religious values or belief systems. In other words, the age of the subjects may explain the non-significance of religion in this study.

Hypothesis 8: Beta 2 coefficient was .54 with a t-value of 4.06, thus confirming the positive relationship between social support and adolescent family life satisfaction.

Hypotheses 10 to 16: Age and gender had low correlations and were not included in the revised model. However, hypothesis 12 was confirmed that adolescent girls were more likely to engage in social support. These results are consistent with Patterson and McCubbin's (1991) findings that "coping patterns for males and females were overall quite similar" (p. 248). Possibly age would have reflected significant differences if age were more evenly distributed within the overall sample.

Overall, the results demonstrate that the coping method used has an impact upon family life satisfaction. AFLS is enhanced by the use of social supports, and suggests that social support acts as a stress-buffer. However, when detrimental coping is used there is a negative impact upon family life satisfaction, and acts as an intervening or mediating factor between stress and family life satisfaction.

### Discussion

This study examined factors that influence adolescent family life satisfaction, accounting for stressful life events and adolescent coping behaviors. The causal relations among the variables in the model were guided almost exclusively by family stress theory. However, there is no inference of "cause" to be made. Stressful life events were measured as the subjects' individual perceptions. Detrimental coping, social supports, and religion are conceptualized by stress theory as intervening factors between stressful life events and adolescent family life satisfaction (i.e., stress and adaptational outcomes).

There appears to be a mediating factor between life events and family life satisfaction. The model suggests that type of coping strategy can reduce or increase the impact of stress on adolescent family life satisfaction. There appears to be two issues; the difference between a

mediator (detrimental coping) and a stress-buffer (social support). Detrimental coping helps "explain" how stress reduces adolescent family life satisfaction, while social support may "block" the potential negative impact of stress events on AFLS.

The results of this study indicate that family satisfaction is enhanced by a strong social support system, and decreased by detrimental coping mechanisms such as, avoidance or ventilating feelings. Coping has a stress-buffering role because this coping strategy reduces the total effect of stress on family life satisfaction. These results may relate to Henry's (1994) findings that adolescent's perceptions of parental support were positively related to family life satisfaction, while perceptions of parental punitiveness were negatively related to adolescent family life satisfaction. Henry (1994) found that adolescents who reported greater satisfaction with family life were more likely to perceive their parents as utilizing support with limited use of punitiveness.

Any one of the four categories (i.e., sexual, school, personal, or family) of stressful life events did not appear to be more stressful than the other. The perception of stress in sexual activity, family, personal, and school was relatively equal. Although, the coping method used does influence adolescent family life satisfaction. The direct effect of stress on adolescent family life satisfaction was

non-significant, yet the indirect effect was significant.

There is evidence that family satisfaction could be improved among adolescents as their social support system improved. The social supports in this study included family, friends, seeking professional help, and helping to solve family problems. In other words, having the resources of family, friends, and professionals available to work through varying life events may improve adolescent's family life satisfaction.

For professionals working with adolescents and their families this study confirms the importance of building and creating strong social supports. These social supports could be enhanced by teaching adolescents communication skills, positive appraisal, problem solving skills, and developing social supports, to name a few.

This study suggests that as detrimental coping increased, adolescent family satisfaction decreased. Detrimental coping included avoidance and ventilating feelings. Avoidance included the use of drugs, alcohol, smoking, staying away from home as much as possible, and ignoring problems. Ventilating feelings included blaming, yelling, swearing, and complaining to family and friends. These indicators may be used as a "red flag" for families, educators, and therapists working with adolescents.



### Conclusion

There appear to be intervening positions that decrease the use of detrimental coping or increase social supports which enhance adolescent family life satisfaction. Family life educators, parents, school counselors, and family therapists can intervene in the adolescents life to both encourage stronger social supports and discourage detrimental coping in order to enhance adolescent family life satisfaction. The results of this study indicate that the coping method used has an impact upon family life satisfaction. AFLS was enhanced by the use of social supports, and suggests that social support acts as a stress-buffer. When detrimental coping was used there was a negative impact upon family life satisfaction, and acted as an intervening or mediating factor between stress and family life satisfaction. There is evidence that family satisfaction could be improved among adolescents as their social support system improved.

Another important finding is the relationship between stress and detrimental coping. This study suggests that as stress increases adolescents more generally chose detrimental coping behaviors. Again, professionals can use this information to help adolescents guard against the detrimental coping choices by helping adolescents create stronger support systems.

Because some of the model's modifications were made

post hoc and derived empirically (rather than theoretically), it is necessary for future research to cross-validate the model with other samples of adolescents. Cross-validation of the model was not done because the sample size did not allow for cross-validation.

In future studies, exploring the family structure of adolescents who employed detrimental coping or social support coping would be helpful. Does the family structure influence the coping behavior choice? Does birth order influence the choice of coping behavior used? Also, do the parenting behaviors, such as punitiveness, influence detrimental coping or seeking social support?

Table 4. DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Characteristics	n	percent
Age		
14	24	8
15	102	33
16	103	33
17	46	15
18	26	8
19	8	3
20	3	1
(Mean age = 15.95 Standard Deviation = 1.23)		
Gender		
males	160	51
females	152	49
Ethnic background		
Caucasian	188	60
African American	72	23
American Indian	25	8
Latino	11	4
Asian	9	3
Other	7	2
(subjects indicated a mixed race)		
Religious background		
Protestant	174	56
Catholic	42	14
Jewish	2	1
Latter Day Saints	4	1
Moslem	4	1
No religious preference	77	25
Other	8	3
Education of Mother		
Graduate training	17	6
College degree	54	18
Some college	55	18
Vocational training	26	9
High school graduate	102	33
Some high school	44	14
Less than 9 years	7	2

Table 4. (Continued)

<u>Characteristics</u>	<u>n</u>	<u>percent</u>
Education of Father		
Graduate training	17	6
College degree	63	22
Some college	45	15
Vocational training	33	11
High school graduate	92	32
Some high school	35	12
Less than 9 years	7	2
Marital status of Mother		
Married	123	40
Divorced	74	24
Separated	22	7
Deceased	8	3
Remarried	66	21
Other	17	5
(Meaning Mother never married Father)		
Marital status of Father		
Married	125	41
Divorced	72	24
Separated	21	7
Deceased	8	3
Remarried	65	21
Other	14	5
Siblings		
0	26	8
1	91	29
2	77	25
3	50	16
4	21	7
5	13	4
6	11	4
7	4	1
8	8	3
9 or more	10	3
(One subject gave no informatin on siblings)		

Table 4. (Continued)

<u>Characteristics</u>	<u>n</u>	<u>percent</u>
Birth order		
No older siblings	105	34
1 older sibling	98	32
2 older siblings	54	17
3 older siblings	22	7
4 older siblings	9	3
5 older siblings	3	1
6 older siblings	6	2
7 to 13 older siblings	15	4
Family structure		
living with father	156	50
living with stepfather	45	14
living with mother	258	83
living with stepmother	13	4
living with siblings	179	57
living with step-siblings	16	5
living with relatives	20	6
living with friends	6	2
living with others	24	8
<u>(reported as boyfriend, girlfriend)</u>		

Table 5. MEASURES USED IN STUDY

Variable	Instrument	Range		# of Items	Original Alpha	Current Alpha
		Possible	Actual			
Adolescent family life satisfaction <sup>(a)</sup>	Adolescent Family Life Satisfaction Index (Henry et al., 1992)	7-35	7-35	7	.88	.84
Parents		6-30	6-30	6	.89	.88
Siblings				13	.90	.86
Life event stressors <sup>(b)</sup>	Adolescent Life Events Checklist (ALEC)	0-30	0-21	10		.71
Sexual	(Fournier, 1987)	0-36	0-31	13		.76
Family		0-42	0-35	14		.75
Personal		0-15	0-12	5		.61
School				42	.88	.88
Dimensions of coping <sup>(a)</sup>						
Ventilating	Adolescent Coping	6-30	6-28	6	.75	.72
Avoiding		5-25	5-25	5	.71	.62
Social support	Orientation for Problem	6-30	6-30	6	.75	.70
Solving Prob.	Experiences (A-COPE)	6-30	6-28	6	.71	.72
Close Friends		2-10	2-10	2	.76	.64
Seek Prof.	Patterson et al., 1983)	2-10	2-10	2	.50	.43
Religiosity <sup>(a)</sup>	Intrinsic Religiosity					
Intrinsic	Excerpt from Gorsuch, Venable, & Schumm				.80	.79

<sup>(a)</sup> = 5 point Likert-type scale<sup>(b)</sup> = 4 point Likert-type scale

Table 6. ORIGINAL MODEL, CORRELATION MATRIX, MEANS, AND STANDARD DEVIATIONS

N=227

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Sex																			
1. Age	1.00																		
2. Gender	-0.08	1.00																	
Stress Event																			
3. Sexual	0.12	0.29	1.00																
4. Family	0.05	0.16	0.53	1.00															
5. Personal	0.13	0.13	0.56	0.65	1.00														
6. School	0.45	-0.05	0.37	0.49	0.54	1.00													
Detrimental Coping																			
7. Avoidance	-0.03	0.07	0.28	0.30	0.39	0.27	1.00												
8. Ventilating	-0.03	0.15	0.19	0.16	0.26	0.23	0.31	1.00											
9. Diversions	-0.04	0.00	0.02	0.05	0.12	0.10	0.15	0.23	1.00										
10. Relaxing	-0.02	0.13	0.13	0.12	0.12	0.08	0.17	0.10	0.43	1.00									
Social Support																			
11. Social Support	0.05	0.33	0.26	0.27	0.20	0.12	0.09	0.19	0.36	0.38	1.00								
12. Solving Prob	0.04	-0.02	-0.04	-0.06	-0.06	-0.04	-0.16	0.11	0.28	0.14	0.43	1.00							
13. Friends	0.06	0.14	0.17	0.13	0.09	-0.01	0.07	0.07	0.31	0.33	0.39	0.17	1.00						
14. Seek Profess	0.17	-0.15	0.17	0.16	0.14	0.10	0.21	0.13	0.23	0.16	0.26	0.30	0.08	1.00					
Religion																			
15. Intrinsic	0.04	0.03	-0.01	0.02	-0.01	-0.06	-0.20	-0.08	0.00	0.08	0.23	0.28	0.13	0.12	1.00				
Self Esteem																			
16. SLF 1	0.02	0.26	0.07	0.09	0.06	0.05	0.05	0.16	0.25	0.23	0.37	0.18	0.19	-0.02	0.07	1.00			
17. SLF 2	0.10	-0.03	0.02	0.09	0.04	0.09	0.01	0.14	0.38	0.36	0.55	0.45	0.32	0.24	0.29	0.39	1.00		
Family Satisfaction																			
18. Parents	0.04	-0.09	-0.15	-0.19	-0.15	-0.16	-0.29	-0.12	0.18	0.03	0.10	0.37	0.13	0.09	0.23	0.11	0.17	1.00	
19. Siblings	0.01	0.03	-0.18	-0.05	-0.02	0.02	-0.11	-0.03	0.10	-0.04	0.09	0.22	0.05	0.06	0.06	0.13	0.02	0.38	1.00
Mean	15.95	1.49	1.81	3.33	3.20	1.08	2.37	2.79	5.12	3.46	3.05	2.65	3.43	1.61	3.25	3.52	2.84	2.95	3.15
Std. Deviations	1.23	0.50	1.74	2.58	2.63	1.16	0.84	0.82	1.31	0.73	0.80	0.82	1.13	0.83	0.80	1.03	0.87	0.89	0.91

## References

- Allen, J. P., Aber, J. L., & Leadbeater, B. J. (1990). Adolescent problem behaviors: The influence of attachment and autonomy. Psychiatric Clinics of North America, 13(3), 455-467.
- Andrews, F. M., & Withey, S. B. (1976). Social indicators of well-being: Americans' perception of life quality. New York: Plenum.
- Baer, P. E., Garnezy, L. B., McLaughlin, R. J., & Pokorny, A. D. (1987). Stress, coping, family conflict, and adolescent alcohol use. Journal of Behavioral Medicine, 10(5), 449-466.
- Bahr, H. M., & Chadwick, B. A. (1985). Religion and family in Middletown, USA. Journal of Marriage and the Family, 47(2), 407-414.
- Balk, D. E. (1991). Sibling death, adolescent bereavement, and religion. Death Studies, 15(1), 1-20.
- Barrett, M. E., Simpson, D. D., & Lehman, W. E. (1988). Behavioral changes of adolescents in drug abuse intervention programs. Journal of Clinical Psychology, 44(3), 461-473.



- Bearden, W. O., Sharma, S., & Teel, J. E. (1982). Sample size effects on chi-square and other statistics used in evaluating causal models. Journal of Marketing Research, 19, 425-430.
- Benson, M. J., Harris, P. B., & Rogers, C. S. (1992). Identity consequences of attachment to mothers and fathers among late adolescents. Journal of Research on Adolescence, 2(3), 187-204.
- Bentler, P. M. (1980). Multivariate analysis with latent variables: Causal modeling. Annual Review of Psychology, 31, 419-456.
- Bentler, P. M., & Chou, C. (1987). Practical issues in structural modeling. Sociological Methods and Research, 16, 78-117.
- Bird, G. W., & Harris, R. L. (1990). A comparison of role strain and coping strategies by gender and family structure among early adolescents. Journal of Early Adolescence, 10(2), 141-158.
- Boss, P. (1980). Normative family stress: Family boundary changes across the life-span. Family Relations, 29, 445-450.
- Broman, C. L. (1991). Gender, work-family roles, and psychological well-being of blacks. Journal of Marriage and the Family, 53, 509-520.

- Brown, A. C., & Orthner, D. K. (1990). Relocation and personal well-being among early adolescents. Journal of Early Adolescence, 10(3), 366-381.
- Brown, B. B., Lohr, M. J., & McClenahan, E. L. (1986). Early adolescents' perceptions of peer pressure. Journal of Early Adolescence, 6(12), 139-154.
- Brown, B. B., Mounts, N., Lamborn, S. D., & Steinberg, L. (1993). Parenting practices and peer group affiliation in adolescence. Child Development, 64(2), 467-482.
- Brown, L. K., Spirito, A., Reynolds, L. A., & Hemstreet, A. (1992). Adolescent coping behavior when confronted with a friend with AIDS. Journal of Adolescence, 15(4), 467-477.
- Bukoski, W. J. (1985). School-based substance abuse prevention: A review of program research. Journal of Children in Contemporary Society, 18(1-2), 95-115.
- Burke, J. W. (1989). Parent-adolescent relationships and family systems functioning. Unpublished doctoral dissertation, Oklahoma State University, Stillwater, OK.
- Burr, W. R. (1973). Theory construction and the sociology of the family. New York: Wiley.
- Campbell, A., Converse, P. E., & Rogers, W. L. (1976). The quality of American life: Perceptions, evaluations, and satisfaction. New York: Russell Sage Foundation.

- Cappelli, M., McGrath, P. J., Heick, C. E., & MacDonald, N. E. (1989). Chronic disease and its impact: The adolescent's perspective. Journal of Adolescent Health Care, 10(4), 283-288.
- Capra, F. (1982). The turning point. New York: Simon & Schuster.
- Clavan, S. (1978). The impact of social class and social trends on the role of grandparent. Family Coordinator, 27, 351-357.
- Cohen, L. H., Burt, C. E., & Bjorck, J. P. (1987). Life stress and adjustment: Effects of life events experienced by young adolescents and their parents. Developmental Psychology, 23(4), 583-592.
- Cohen, J. & Cohen, J. (1983). Applied multiple regression/correlation analysis for the behavioral science (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Compas, B. E. (1987). Coping with stress during childhood and adolescence. Psychological Bulletin, 101(3), 393-403.
- Covey, L. A., & Feltz, D. L. (1991). Physical activity and adolescent female psychological development. Journal of Youth and Adolescence, 20(4), 463-474.
- Dielman, T. E., Shope, J. T., Butchart, A. T., & Campanelli, P. C. (1989). A covariance structure model test of antecedents of adolescent alcohol misuse and a prevention effort. Journal of Drug Education, 19(4), 337-361.

- Douthitt, R. A., MacDonald, M., & Mullins, R. (1992). The relationship between measures of subjective and economic well-being: A new look. Social Indicators Research, 26, 407-422.
- Eiser, J. R., Morgan, M., & Gammage, P. (1988). Social education is good for health. Educational Research, 30(1), 20-25.
- Farber, B. (1959). Effects of a severely mentally retarded child on family integration. Monographs of the Society for Research in Child Development, 24(71), 80-94.
- Fournier, D. G. (1981). Adolescent Life Events Check-list (ALEC), Unpublished manuscript, Oklahoma State University, Family Relations and Child Development, Stillwater, OK.
- Frankel, K. A. (1990). Girls' perceptions of peer relationship support and stress. Journal of Early Adolescence, 10(1), 69-88.
- Friedman, A. S., Tomko, L. A., & Utada, A. (1991). Client and family characteristics that predict better family therapy outcome for adolescent drug abusers. Family Dynamics of Addiction Quarterly, 1(1), 77-93.
- Frydenberg, E., & Lewis, R. (1991). Adolescent coping: The different ways in which boys and girls cope. Journal of Adolescence, 14(2), 119-133.
- Gecas, V. (1989). The social psychology of self-efficacy. Annual Review of Sociology, 15, 291-316.

- Goetting, A. (1986). The developmental tasks of siblingship over the life cycle. Journal of Marriage and the Family, 48, 703-714.
- Gorsuch, R. L., & Venable, G. D. (1983). Development of an "age universal" I-E scale. Journal for the Scientific Study of Religion, 22, 181-187.
- Groer, M. W., Thomas, S. P., & Shoffner, D. (1992). Adolescent stress and coping: A longitudinal study. Research in Nursing and Health, 15(3), 209-217.
- Gutek, B. A., Allen, H., Tyler, T. R., Lau, R. R., & Majchrzak, A. (1983). The importance of internal referents as determinants of satisfaction. Journal of Community Psychology, 11(2), 111-122.
- Haley, J. (1980). Leaving home: The therapy of disturbed young people. New York: McGraw-Hill.
- Haley, J. (1973). Uncommon therapy: The psychiatric techniques of Milton H. Erickson, M.D.: A casebook of an innovative psychiatrist's work in short-term therapy. New York: W.W. Norton.
- Hansen, D. A., & Hill, R. (1964). Families under stress. In H. Christensen (Ed.), The handbook of marriage and the family (pp. 782-819). Chicago: Rand McNally.
- Hardin, S. B., Carbaugh, L., Weinrich, S., Pesut, D. (1992). Stressors and coping in adolescents exposed to Hurricane Hugo. Issues in Mental Health Nursing, 13(3), 191-205.

- Harken, L. S. (1987). The prevention of adolescent smoking: A public health priority. Evaluation and the Health Professions, 10(4), 373-393.
- Harrison, A., Seratica, F., & McAdoo, H. (1984). Ethnic families of color. In R. D. Parke (Ed.), Review of child development research: Vol 7. The family (pp.329-371). Chicago: University of Chicago.
- Hayduk, L. A. (1987). Structural equation modeling with LISREL: Essentials and advances. Baltimore: John Hopkins Press.
- Henry, C. S. (1994). Family system characteristics, parental behaviors, and adolescent family life satisfaction. Family Relations, 43, 447-455.
- Henry, C. S., Ostrander, D. L., & Lovelace, S. G. (1992). Reliability and validity of the adolescent family life satisfaction index. Psychological Reports, 70, 1223-1229.
- Hill, R. (1958). Generic features of families under stress. Social casework, 49, 139-150.
- Hoelter, J. & Harper, L. (1987). Structural and interpersonal family influences on adolescent self-conception. Journal of Marriage and the Family, 49, 129-139.

- Hoffman, M. A., Levy-Schiff, R., Sohlberg, S. C., & Zarizki, J. (1992). The impact of stress and coping: Developmental changes in the transition to adolescence. Journal of Youth and Adolescence, 35(4), 524-537.
- Jenkins, C. D., Hurst, M. W., & Rose, R. M. (1979). Life changes: Do people really remember? Archives of General Psychiatry, 36, 379-384.
- Johnson, J. H. (1986). Life events as stressors in childhood and adolescence. Beverly Hills: Sage.
- Joreskog, K. G., & Sorbom, D. (1984). LISREL VI: Analysis of linear structural relationships by the method of maximum likelihood: User's guide. Mooreville, IN: Scientific Software.
- Kaliski, E. M., Robinson, L., Lawrance, L., & Levy, S. R. (1990). AIDS, runaways, and self-efficacy. Family and Community Health, 13(1), 65-72.
- Kissman, K., & Shapiro, J. (1990). The composites of social support and well-being among adolescent mothers. International Social Work Journal, 2(3), 165-173.
- Kluwin, T., Blennerhassett, L., & Sweet, C. (1990). The revision of an instrument to measure the capacity of hearing-impaired adolescent to cope. Volta-Review, 92(6), 283-291.

- Koch-Hattem, A., Hattem, D. M., & Plummer, L. P. (1987).  
The role of mental-health resources in explaining family  
adaptation to stress: A preliminary analysis. Family  
Systems Medicine, 5(2), 206-219.
- Kurdek, L. A. (1987). Gender differences in the  
psychological symptomatology and coping strategies of  
young adolescents. Journal of Early Adolescence, 7(4),  
395-410.
- Lamanna, M. A., & Riedmann, A. (1991). Marriages and  
families. Belmont, CA: Wadsworth.
- Lamb, M. E. (1982). Sibling relationships across the life  
span: An overview and introduction. In M. E. Lamb & B.  
Sutton-Smith (Eds.), Sibling relationships: Their  
nature and significance across the lifespan (pp. 1-11).  
Hillsdale, NJ: Lawrence Erlbaum.
- Laosa, L. M. (1984). Social policies toward children of  
diverse ethnic, racial, and language groups in the United  
States. In H. W. Stevenson & A. E. Seigel (Eds.), Child  
development research and social policy (pp. 1-109).  
Chicago: University of Chicago.
- Lavee, Y. (1988). Linear structural relationships (LISREL)  
in family research. Journal of Marriage and the Family,  
50, 937-948.



- Lavee, Y., McCubbin, H. I., & Olson, D. H. (1987). The effect of stressful life events and transitions on family functioning and well-being. Journal of Marriage and the Family, 49(4), 857-873.
- Lee, Hing chu B., Chan, D. W., and Yik, M. S. (1992). Coping styles and psychological distress among Chinese adolescents in Hong Kong. Journal of Adolescent Research, 7(4), 494-506.
- Maddi, S. (1981). Individual development: Its significance for stress responsitivity and stress adaptation. Personality development. In C. Moore (Ed.), Adolescence and stress (pp.15-33), (DHHS Publication No. ADM 81-1098). Washington, DC: U.S. Government Printing Office.
- Maton, K. I. (1990). Meaningful involvement in instrumental activity and well-being: Studies of older adolescents and at risk urban teen-agers. American Journal of Community Psychology, 18(2), 297-320.
- McCubbin, H., & Dahl, B. (1975). Coping with separation inventory. San Diego, CA, Family Studies Branch, Naval Health Research Center.
- McCubbin, H., & McCubbin, M. (1987). Family stress theory and assessment: The T-Double ABCX Model of family adjustment and adaptation. In H. McCubbin & A. Thompson (Eds.), Family assessment inventories for research and practice (pp.3-25). Madison: University of Wisconsin, Madison.

- McCubbin, M. A., & McCubbin, H. I. (1991). Family stress theory and assessment: The resiliency model of family stress, adjustment, and adaptation. In H. McCubbin & A. Thompson (Eds.), Family assessment inventories for research and practice (pp. 3-32). Madison: University of Wisconsin, Madison.
- McCubbin, M. A., & McCubbin, H. I. (1989). Theoretical orientations to family stress and coping. In C. Figley (Ed.), Treating families under stress (pp. 3-43). New York: Brunner/Mazel.
- McCubbin, H. I., Needle, R. H., Lazar, A., & Reineck, R. (1985, November). Adolescent non-use and illegal substance use: family stress, parental coping, peer influence, and adolescent coping as critical influential factors. Paper presented at the Research and Theory Section, Annual Meeting of the National Council on Family Relations, Dallas, TX.
- McCubbin, H. I., Needle, R. H., & Wilson, M. (1985). Adolescent health risk behaviors: Family stress and adolescent coping as critical factors. Family Relations, 34(1), 51-62.
- McCubbin, H. I., & Patterson, J. M. (1983a). Stress: The family inventory of life events and changes. In E. Filsinger (Ed.), Marriage and family assessments: A source book for family therapy. (pp. 3-43) Beverly Hills: Sage.

- McCubbin, H. I., & Patterson, J. M. (1983b). Family stress and adaptation to crisis: A Double ABCX Model of family behavior. In D. H. Olson & B. C. Miller (Eds.), Family studies review yearbook 1, (pp. 87-106). Beverly Hills: Sage.
- McCubbin, H. I., & Patterson, J. M. (1983c). Family transitions: Adaptations to stress. In H. I. McCubbin & C. R. Figley (Eds.), Stress and the family: Coping with normative transitions 1, (pp. 5-25). New York: Brunner/Mazel.
- McGaha, J. E., & Fournier, D. G. (1987). Juvenile justice and the family: A system approach to family assessment. Marriage and Family Review, 12, 155-172.
- Mullis, R. L., Youngs, Jr., G. A., Mullis, A. K., & Rathge, R. W. (1993). Adolescent stress: Issues of measurement. Adolescence, 28(110), 267-279.
- Newcomb, M., Huba, G., & Bentler, P. (1981). A multidimensional assessment of stressful life events among adolescents: Derivation and correlates. Journal of Health and Social Behavior, 22, 400-414.
- Oetting, E. R., & Beauvais, F. (1986). Peer cluster theory: Drugs and the adolescent. Journal of Counseling and Development, 65(1), 17-22.
- Olson, D., McCubbin, H., Barnes, H., Larsen, A., Muxem, A., & Wilson, M. (1983). Families: What makes them work. Beverly Hills: Sage.

- Ortman, P. E. (1988). Adolescents' perceptions of and feelings about control and responsibility in their lives. Adolescence, 23(92), 913-924.
- Papini, D. R., Farmer, F. F., Clark, S. M., Micka, J. C., & Barnett, J. K. (1990). Early adolescent age and gender differences in patterns of emotional self-disclosure to parents and friends. Adolescence, 25(100), 959-976.
- Patterson, J., & McCubbin, H. (1991). A-COPE -- Adolescent coping orientation for problem experiences (Research Instrument). In H. McCubbin & A. Thompson (Eds.), Family assessment inventories for research and practice (pp. 233-252). Madison, WI: University of Wisconsin.
- Patterson, J. M., & McCubbin, H. I. (1987). Adolescent coping style and behaviors: Conceptualization and measurement. Journal of Adolescence, 10(2), 163-186.
- Patterson, J. M., & McCubbin, H. I. (1984). Gender roles and coping. Journal of Marriage and the Family, 46(1), 95-104.
- Peters, D. F., Wilson, S. M., & Peterson, G. W. (1986). Adolescents and rural Appalachian families. In G. K. Leigh & G. W. Peterson (Eds.), Adolescents in families (456-472). Cincinnati, OH: South-Western.
- Peterson, G. W., & Ellis, G. J. (1986). Countering ethnic and cultural myopia in the study of families. Family Perspectives, 20, 237-239.

- Pietromonaco, P. R., Manis, J., & Frohardt-Lane, K. (1986).  
Psychological consequences of multiple social roles.  
Psychology of Women Quarterly, 10(4), 373-381.
- Powers, P. W. (1979). The chronically ill husband and  
father: His role in the family. Family Coordinator, 28,  
616-621.
- Price-Bonham, S., & Addison, S. (1978). Families and  
mentally retarded children: Emphasis on the father.  
Family Coordinator, 27, 221-230.
- Schellenbach, C. J., & Guernsey, L. F. (1987).  
Identification of adolescent abuse and future  
intervention prospects. Journal of Adolescence, 10(1),  
1-12.
- Schumm, W. R. (1994). Personal interview.
- Schumm, W. R., Bugaighis, M. A., Bollman, S. R., & Jurich,  
A. P. (1986). Meaning and impact of family satisfaction  
upon subjective quality of life: Perceptions of fathers,  
mothers, and adolescents. In J. L. Hafstrom (Ed.),  
Compendium of quality of life research (pp. 57-70).  
Urbana-Champaign, IL: Illinois Agricultural Experiment  
Station, University of Illinois at Urbana-Champaign.
- Schumm, W. R., Bugaighis, M. A., Jurich, A. P., & Bollmon,  
S. R. (1986). Example and explanation as predictors of  
adolescent compliance with parental instructions.  
Journal of Social Behavior and Personality, 1, 465-470.

- Schumm, W. R., Hatch, R. C., Hevelone, J., & Schumm, K. R. (1991). Attrition and retention among Christian Church (Disciples of Christ) congregations in three metropolitan regions: A mail survey of 1,149 active and inactive members. In D. Newell Williams (Ed.), A case study of mainstream protestantism. Grand Rapids, MI: William B. Eerdmans.
- Schumm, W. R., McCollum, E. E., Bugaighis, M. A., Jurich, A. P., & Bollman, S. R. (1986). Characteristics of the Kansas Family Life Satisfaction Scale in a regional sample. Psychological Reports, 58, 975-980.
- Shulman, S., Seiffge-Krenke, I., & Samet, N. (1987). Adolescent coping style as a function of perceived family climate. Journal of Adolescent Research, 2(4), 367-381.
- Silverberg, S. B., & Steinberg, L. (1987). Adolescent autonomy, parent-adolescent conflict, and parental well-being. Journal of Youth and Adolescence, 16, 293-312.
- St. Mary, S., & Russo, T. J. (1990-91). A self-efficacy scale for chemical dependency in adolescence. Psychology: A Journal of Human Behavior, 27(4)-28(1), 62-68.
- Stacy, A. W., Sussman, S., Dent, C. W., & Burton, D. (1992). Moderators of peer social influence in adolescent smoking. Personality and Social Psychology Bulletin, 18(2), 163-172.

- Steinberg, L., Fegley, S., & Dornbusch, S. M. (1993). Negative impact of part-time work on adolescent adjustment: Evidence from a longitudinal study. Developmental Psychology, 29(2), 171-180.
- Steinberg, L., & Levine, A. (1990). You and your adolescent: A parent's guide for ages 10-20. New York: Harper & Row.
- Stern, M., Van-Slyck, M. R., & Newland, L. M. (1992). Adolescent development and family dynamics: Delineating a knowledge base for family mediation. Mediation Quarterly, 9(4), 307-322.
- Stinnett, N., & DeFrain, J. (1985). Secrets of strong families. Boston: Little, Brown.
- Swearingen, E., & Cohen, L. (1985). Life events and psychological distress: A prospective study of young adolescents. Developmental Psychology, 21, 1045-1054.
- Tolin, P. (1988). Socioeconomic, family, and social stress correlates of adolescent antisocial and delinquent behavior. Journal of Abnormal Child Psychology, 16(3), 317-331.
- Unger, D. G., & Wandersman, L. P. (1988). The relation of family and partner support to the adjustment of adolescent mothers. Child Development, 59(4), 1056-1060.
- Walker, A. J. (1985). Reconceptualizing family stress. Journal of Marriage and the Family, 47(4), 827-838.

- Warren-Sohlberg, L., & Jason, L. A. (1992). How the reason for a school move relates to school adjustment. Psychology in the Schools, 29(1), 78-84.
- Weinert, C., & Long, K. A. (1987). Understanding the health care needs of rural families. Family Relations, 36(4), 450-455.
- Wilcox, A. R. (1981). Dissatisfaction with satisfaction: Subjective social indicators and the quality of life. In D. F. Johnston (Ed.), Measurement of subjective phenomena (pp.1-20). Washington, DC: Department of Commerce. Special Demographic Analysis CDS-80-3.
- Wilson, S. M., Henry, C. S., & Peterson, G. W. (1993). Predictors of life satisfaction among low-income, rural youth. Unpublished manuscript.
- Wilson, S. M., & Peterson, G. W. (1988). Life satisfaction among young adults from rural families. Family Relations, 37, 84-91.
- Wilson, S. M., Peterson, G. W., & Wilson, P. (1993). The process of educational and occupational attainment of adolescent females from low-income, rural families. Journal of Marriage and the Family, 55, 158-175.
- Woodward, J. C., & Kaylan-Masih, V. (1990). Loneliness, coping strategies and cognitive styles of the gifted rural adolescent. Adolescence, 25(100), 977-988.



Youniss, J., & Ketterlinus, R. D. (1987). Communication and connectedness in mother - and father - adolescent relationships. Journal of Youth and Adolescence, 16(3), 265-280.

## Appendix D

### Instruments Used in the Study

## BACKGROUND INFORMATION

## ABOUT YOU

Age ☐ ☐ Grade in school ☐ ☐ Sex ☐ male ☐ female  
 Race ☐ Asian ☐ Black ☐ Caucasian (white) ☐ Latino ☐ American Indian ☐ Other \_\_\_\_\_ (write in)  
 Religious ☐ None ☐ Protestant ☐ Catholic ☐ Jewish ☐ Latter Day Saints  
 Preference ☐ Moslem ☐ Other \_\_\_\_\_ (write in)

## ABOUT PARENTS

## Present Marital Status

	Mother (check one) <sup>13</sup>	Father (check one) <sup>14</sup>
Married	<input type="checkbox"/>	<input type="checkbox"/>
Divorced	<input type="checkbox"/>	<input type="checkbox"/>
Separated	<input type="checkbox"/>	<input type="checkbox"/>
Deceased	<input type="checkbox"/>	<input type="checkbox"/>
Remarried	<input type="checkbox"/>	<input type="checkbox"/>
Other	_____ (write in)	_____ (write in)

## Education

	Mother (check highest one completed) <sup>21</sup>	Father (check highest one completed) <sup>22</sup>
Graduate professional training	<input type="checkbox"/>	<input type="checkbox"/>
College degree	<input type="checkbox"/>	<input type="checkbox"/>
Some college	<input type="checkbox"/>	<input type="checkbox"/>
Vocational training	<input type="checkbox"/>	<input type="checkbox"/>
High School graduation	<input type="checkbox"/>	<input type="checkbox"/>
Some high school	<input type="checkbox"/>	<input type="checkbox"/>
Less than 9 years school	<input type="checkbox"/>	<input type="checkbox"/>

Mother's Occupation \_\_\_\_\_ (write in) ☐ ☐ <sup>23</sup>

Father's Occupation \_\_\_\_\_ (write in) ☐ ☐ <sup>24</sup>

## ABOUT FAMILY

How many brothers/sisters do you have? ☐ ☐ <sup>25</sup>

How many are older than you? ☐ ☐ <sup>26</sup>

Who lives with you now? (check all that apply)

☐ Father ☐ Stepfather ☐ Mother ☐ Stepmother ☐ Brothers/Sisters  
☐ Stepbrothers/Stepsisters ☐ Relatives ☐ Friends ☐ Other \_\_\_\_\_ (write in) <sup>27</sup>

# ADOLESCENT LIFE EVENTS CHECKLIST

INSTRUCTIONS: Many events occur during a given year that create a certain amount of stress in our lives. Please look at the list below and check those events which have occurred during the PAST YEAR (12 months) and rate the amount of stress experienced with each event.

ID \_\_\_\_\_

- |   |   |   |   |  |
|---|---|---|---|--|
|   |   |   |   | NO, life event did not occur                               |
|   |   |   |   | YES, life event occurred but was not stressful             |
|   |   |   |   | YES, life event occurred and was stressful                 |
|   |   |   |   | YES, life event occurred and was highly stressful          |
| 0 | 1 | 2 | 3 |  |
| 0 | 1 | 2 | 3 | 1. Pregnancy of self or close friend                       |
| 0 | 1 | 2 | 3 | 2. Miscarriage of self or close friend                     |
| 0 | 1 | 2 | 3 | 3. Pregnancy of your mother                                |
| 0 | 1 | 2 | 3 | 4. Miscarriage of your mother                              |
| 0 | 1 | 2 | 3 | 5. Abortion for self or close friend                       |
| 0 | 1 | 2 | 3 | 6. Change in relationship with people you know             |
| 0 | 1 | 2 | 3 | 7. Change in birth control method                          |
| 0 | 1 | 2 | 3 | 8. Close relationship with opposite sex friend             |
| 0 | 1 | 2 | 3 | 9. Change in number of arguments with parents              |
| 0 | 1 | 2 | 3 | 10. Change in sleeping habits                              |
| 0 | 1 | 2 | 3 | 11. Change in eating habits                                |
| 0 | 1 | 2 | 3 | 12. Death of close friend or relative                      |
| 0 | 1 | 2 | 3 | 13. Close friend or relative has major accident or illness |
| 0 | 1 | 2 | 3 | 14. Employment (new job, seeking job or changes in job)    |
| 0 | 1 | 2 | 3 | 15. Use of drugs by you or someone in your family          |
| 0 | 1 | 2 | 3 | 16. Divorce or remarriage of parents                       |
| 0 | 1 | 2 | 3 | 17. Relative or friend moves in with family                |
| 0 | 1 | 2 | 3 | 18. Change in relationship with school officials           |
| 0 | 1 | 2 | 3 | 19. Bad grades or problems at school                       |
| 0 | 1 | 2 | 3 | 20. Transferred to another school                          |
| 0 | 1 | 2 | 3 | 21. Problems with friends                                  |
| 0 | 1 | 2 | 3 | 22. Left home without permission                           |
| 0 | 1 | 2 | 3 | 23. Personal injury or illness                             |
| 0 | 1 | 2 | 3 | 24. Physically threatened or hit by others                 |
| 0 | 1 | 2 | 3 | 25. Use of alcohol by you or a close member of the family  |
| 0 | 1 | 2 | 3 | 26. Your own or a close friends problem with the police    |
| 0 | 1 | 2 | 3 | 27. Conflicts with your brothers and/or sisters            |
| 0 | 1 | 2 | 3 | 28. Parents have arguments, conflicts or physical violence |
| 0 | 1 | 2 | 3 | 29. Change in residence of parents                         |
| 0 | 1 | 2 | 3 | 30. Change in responsibilities at home                     |
| 0 | 1 | 2 | 3 | 31. Money problems experienced by the family               |
| 0 | 1 | 2 | 3 | 32. Family member moved out of home                        |
| 0 | 1 | 2 | 3 | 33. Changes in parents job status                          |
| 0 | 1 | 2 | 3 | 34. Picked up or arrested by the police                    |
| 0 | 1 | 2 | 3 | 35. Touched by person who makes you sexually uncomfortable |
| 0 | 1 | 2 | 3 | 36. Threatened to be sent away from home (shelter, center) |
| 0 | 1 | 2 | 3 | 37. Problems in areas regarding sex.                       |
| 0 | 1 | 2 | 3 | 38. Gang activities by you or a close friend               |
| 0 | 1 | 2 | 3 | 39. Use or threat of weapons at school                     |
| 0 | 1 | 2 | 3 | 40. Use of magic by you or a close friend                  |
| 0 | 1 | 2 | 3 | 41. Use or threat of violence at school                    |
| 0 | 1 | 2 | 3 | 42. Use of satanic rituals by you or a close friend        |

**DIRECTIONS:** Think about the family members living in your home (include stepfamily members or guardians). Decide how you feel about each statement and circle your answer as follows: **STRONGLY DISAGREE (1); DISAGREE (2); ARE NEUTRAL (3); AGREE (4); OR STRONGLY AGREE (5).**

When I think about my parent(s)/stepparent(s)/guardian(s) . (include those present in your home) I am satisfied with:	SD	D	N	A	SA	Not Applicable
1. how much my parent(s) approve of me and the things I do	1	2	3	4	5	
2. The amount of freedom my parent(s) give me to make my own choices	1	2	3	4	5	
3. the ways my parent(s) want me to think and act	1	2	3	4	5	
4. the amount of influence my parent(s) have over my actions	1	2	3	4	5	
5. the ways my parent(s) try to control my actions	1	2	3	4	5	
6. my parent(s) relationship with each other	1	2	3	4	5	One parent family
7. my overall relationship with my parent(s)	1	2	3	4	5	
When I think about my brothers and/or sisters (include stepbrothers/sisters if present in your home). I am satisfied with:	SD	D	N	A	SA	Not Applicable
8. how much my brothers and/or sisters approve of me and the things I do	1	2	3	4	5	No sisters/brothers
9. the amount of freedom my brothers and/or sisters give me to make my own choices	1	2	3	4	5	No sisters/brothers
10. the ways my brothers and/or sisters want me to think and act	1	2	3	4	5	No sisters/brothers
11. the amount of influence my brothers and/or sisters have over my actions	1	2	3	4	5	No sisters/brothers
12. the ways my brothers and/or sisters try to control my actions	1	2	3	4	5	No sisters/brothers
13. my overall relationship(s) with my brothers and/or sisters	1	2	3	4	5	No sisters/brothers

FAMILY STRESS COPING AND HEALTH PROJECT  
1300 Linden Drive  
University of Wisconsin-Madison  
Madison, WI 53706

FAMILY HEALTH PROGRAM  
FORM B  
1983  
H. McCubbin & J. Patterson

# A-COPE

## ADOLESCENT-COPING ORIENTATION FOR PROBLEM EXPERIENCES

Joan M. Patterson

Hamilton I. McCubbin

### PURPOSE

A-COPE is designed to record the behaviors adolescents find helpful to them in managing problems or difficult situations which happen to them or members of their families.

COPING is defined as individual or group behavior used to manage the hardships and relieve the discomfort associated with life changes or difficult life events.

### DIRECTIONS

- Read each of the statements below which describes a behavior for coping with problems.
- Decide how often you do each of the described behaviors when you face difficulties or feel tense. Even though you may do some of these things just for fun, please indicate **ONLY** how often you do each behavior as a way to cope with problems.
- Circle one of the following responses for each statement:  
1 - NEVER    2 - HARDLY EVER    3 - SOMETIMES    4 - OFTEN    5 - MOST OF THE TIME
- Please be sure and circle a response for each statement.

NOTE: Anytime the words parent, mother, father, brother or sister are used, they also mean step-parent, step-mother, etc.

When you face difficulties or feel tense, how often do you	Never	Hardly Ever	Sometimes	Often	Most of the Time	When you face difficulties or feel tense, how often do you	Never	Hardly Ever	Sometimes	Often	Most of the Time
1. Go along with parents' requests and rules	1	2	3	4	5	7. Eat food	1	2	3	4	5
2. Read	1	2	3	4	5	8. Try to stay away from home as much as possible.	1	2	3	4	5
3. Try to be funny and make light of it all	1	2	3	4	5	9. Use drugs prescribed by a doctor	1	2	3	4	5
4. Apologize to people	1	2	3	4	5	10. Get more involved in activities at school	1	2	3	4	5
5. Listen to music-- stereo, radio, etc.	1	2	3	4	5	11. Go shopping; buy things you like	1	2	3	4	5
6. Talk to a teacher or counselor at school about what bothers you	1	2	3	4	5	12. Try to reason with parents and talk things out; compromise	1	2	3	4	5

Please turn over and complete →

When you face difficulties or feel tense, how often do you	Never	Hardly Ever	Sometimes	Often	Most of the Time	When you face difficulties or feel tense, how often do you	Never	Hardly Ever	Sometimes	Often	Most of the Time
13. Try to improve yourself (get body in shape, get better grades, etc.)	1	2	3	4	5	34. Get professional counseling (not from a school teacher or school counselor)	1	2	3	4	5
14. Cry	1	2	3	4	5	35. Try to keep up friendships or make new friends	1	2	3	4	5
15. Try to think of the good things in your life	1	2	3	4	5	36. Tell yourself the problem is not important	1	2	3	4	5
16. Be with a boyfriend or girlfriend	1	2	3	4	5	37. Go to a movie	1	2	3	4	5
17. Ride around in the car	1	2	3	4	5	38. Daydream about how you would like things to be	1	2	3	4	5
18. Say nice things to others	1	2	3	4	5	39. Talk to a brother or sister about how you feel	1	2	3	4	5
19. Get angry and yell at people	1	2	3	4	5	40. Get a job or work harder at one	1	2	3	4	5
20. Joke and keep a sense of humor	1	2	3	4	5	41. Do things with your family	1	2	3	4	5
21. Talk to a minister/priest/rabbi	1	2	3	4	5	42. Smoke	1	2	3	4	5
22. Let off steam by complaining to family members	1	2	3	4	5	43. Watch T.V.	1	2	3	4	5
23. Go to church	1	2	3	4	5	44. Pray	1	2	3	4	5
24. Use drugs (not prescribed by doctor)	1	2	3	4	5	45. Try to see the good things in a difficult situation	1	2	3	4	5
25. Organize your life and what you have to do	1	2	3	4	5	46. Drink beer, wine, liquor	1	2	3	4	5
26. Swear	1	2	3	4	5	47. Try to make your own decisions	1	2	3	4	5
27. Work hard on schoolwork or other school projects	1	2	3	4	5	48. Sleep	1	2	3	4	5
28. Blame others for what's going wrong	1	2	3	4	5	49. Say mean things to people; be sarcastic	1	2	3	4	5
29. Be close with someone you care about	1	2	3	4	5	50. Talk to your father about what bothers you	1	2	3	4	5
30. Try to help other people solve their problems	1	2	3	4	5	51. Let off steam by complaining to your friends	1	2	3	4	5
31. Talk to your mother about what bothers you	1	2	3	4	5	52. Talk to a friend about how you feel	1	2	3	4	5
32. Try, on your own, to figure out how to deal with your problems or tension	1	2	3	4	5	53. Play video games (Space Invaders, Pac-Man) pool, pinball, etc.	1	2	3	4	5
33. Work on a hobby you have (sewing, model building, etc.)	1	2	3	4	5	54. Do a strenuous physical activity (jogging, biking, etc.)	1	2	3	4	5

Everyone has personal viewpoints. There are no right or wrong answers because the questions refer to your own personal values and opinions, which may be very strong.

Scale:       SD - Strongly Disagree  
               D - Disagree  
               ? - Uncertain  
               A - Agree  
               SA - Strongly Agree

To what extent do you agree or disagree with the following statements about society, the church/temple, and your own beliefs? (Please circle your answers)

	<u>Disagree</u>			<u>Agree</u>	
1. I go to church/temple because it helps me to make friends.	SD	D	?	A	SA
2. Sometimes I have to ignore my religious beliefs because of what people might think of me.	SD	D	?	A	SA
3. It is important to me to spend time outside of church/temple in private thought and prayer.	SD	D	?	A	SA
4. I have often had a strong sense of God's presence.	SD	D	?	A	SA
5. I try hard to live all my life according to my religious beliefs.	SD	D	?	A	SA
6. My religion is important to me because it answers many questions about the meaning of life.	SD	D	?	A	SA
7. I would rather join a religious study group than a church social group.	SD	D	?	A	SA
8. Although I am religious, I don't let it affect my daily life.	SD	D	?	A	SA
9. I go to church/temple mainly because I enjoy seeing people I know there.	SD	D	?	A	SA
10. Although I believe in my religion, many other things are more important in life.	SD	D	?	A	SA
11. My relationship with God is a vitally important part of my life.	SD	D	?	A	SA



Appendix E

Cover Letter, Permission Forms and Correspondence, and  
Institutional Review Board Form

# Oklahoma State University

COLLEGE OF HUMAN ENVIRONMENTAL SCIENCES

Department of Family Relations  
and Child Development  
243 Human Environmental Sciences  
Stillwater, Oklahoma 74078-0337  
405-744-5057  
FAX 405-744-7113

May 4, 1994

Dear Student/Parent:

You are invited to take part in a research study on adolescent stress, adolescent coping, and adolescent family life satisfaction.

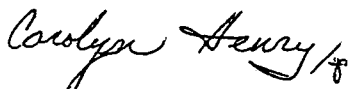
The questionnaire will take about 50 minutes to complete. As a gift for participating, each person will receive a pair of sunglasses. All information obtained from the questionnaire will be confidential.

Attached is a consent form that provides details about the study and how the responses will be used. The student must present the consent form, signed by both the student and his or her parent/guardian.

The statistical knowledge gained from this study will be valuable information to family therapists and school counselors in understanding adolescent stress, coping, and adaptation.

Thank you for your valuable assistance in this study.

Sincerely,



Carolyn S. Henry, Ph.D.  
Associate Professor



Erlene Carson, LPC



## CONSENT FORM

I, \_\_\_\_\_, hereby agree to participate in the following survey conducted by Erlene Carson, LPC:

I understand that my participation in the confidential self-report questionnaire will last approximately 50 minutes and that I will receive a pair of sunglasses for participating.

I authorize the use of the data collected in this survey as part of a study on adolescent stress, adolescent coping, and adolescent family life satisfaction. The questionnaire asks about stressors resulting from school, family, peers, and personal events. Additionally, questions are asked about coping patterns used, such as, social supports, self-reliance, religion, or detrimental means of coping.

I understand my name will not be identified with any data collected in the survey, and the questionnaires will be considered confidential for research use only. I understand all data will be kept in a locked file cabinet.

I understand that my participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this survey at any time without penalty, after notifying the project director.

I understand I may contact:

Erlene Carson, LPC  
5215 East 71st Street  
Suite 1300  
Tulsa, OK 74136  
(918) 496-7737

Carolyn Henry, PH.D.  
Associate Professor  
Oklahoma State Univ.  
HES 333  
Stillwater, OK 74078  
(405) 744-8357

or  
University Research Services  
001 Life Sciences East  
Oklahoma State University  
Stillwater, OK 74078  
(405) 744-5700

I have read and fully understand the consent form. I sign it freely and voluntarily.

\_\_\_\_\_  
Signature of Subject

Date: \_\_\_\_\_

\_\_\_\_\_  
Parent/guardian signature (required to participate in the study)

Date: \_\_\_\_\_

I, Erlene Carson certify that I have personally explained all elements of this form to the subject before requesting the subject and his/her representative to sign it.

OKLAHOMA STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD  
HUMAN SUBJECTS REVIEW

Date: 04-06-94

IRB#:HE-94-035

Proposal Title:FAMILY STRESS, ADOLESCENT COPING, AND ADOLESCENT  
FAMILY LIFE SATISFACTION

Principal Investigator(s):Dr. Carolyn Henry

Reviewed and Processed as:Expedited

Approval Status Recommended by Reviewer(s): Approved

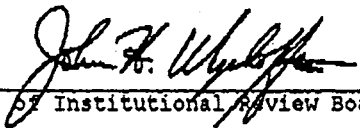
APPROVAL STATUS SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT  
MEETING.

APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR  
RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL. ANY  
MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

---

Comments, Modifications/Conditions for Approval or Reasons for  
Deferral or Disapproval are as follows:

Signature:

  
Chair of Institutional Review Board

Date: April 29, 1994

2  
VITA

Erlene Carson

Candidate for the Degree of  
Doctor of Philosophy

Thesis: FAMILY STRESS, ADOLESCENT COPING, AND  
ADOLESCENT FAMILY LIFE SATISFACTION

Major Field: Human Environmental Sciences

Area of Specialization: Family Relations and  
Child Development

Biographical:

Education: Graduated from Sapulpa High School, Sapulpa, Oklahoma in 1958; attended Tulsa Junior College, Tulsa, Oklahoma, from 1972 to 1977. Received Bachelor of Science degree in University Studies, from Oklahoma State University, Stillwater, Oklahoma, in December, 1978. Completed psychology prerequisites at Tulsa University, Tulsa, Oklahoma, in 1987, and received Master of Arts degree in Christian Counseling from Oral Roberts University, Tulsa, Oklahoma, in May, 1989. Completed the requirements for the Doctor of Philosophy degree from Oklahoma State University in May, 1995.

Experience: Instructor of Marriage and Family class at Oklahoma State University, Stillwater, Oklahoma, from August, 1989, to May, 1991; Counselor for Family and Children's Services, Family Sexual Abuse Treatment Center, Tulsa, Oklahoma, from July, 1994 to present; private practice in marriage and family therapy from February, 1993 to present.

Professional Memberships: American Association of Marriage and Family Therapy, American Counseling Association.